

Lines of City Business **Bakeries and Restaurants.** **VIENNA BAKERY AND LUTHER, 33 Spring.** **Books and Stationery.** **LAZARUS & MELSER, 111 N. Spring.** **Catholic Goods.** **CHALMERS & DONAN, 149 N. Main st., Catholic** **books, candles, oil, church goods and re-** **ligious articles; elegant holiday goods cheap-** **er than ever, now coming in. Catholic stations** **in English, French, German and Spanish.** **City Towel Supply Company.** **CLARK & LITTLE, 40 San Pedro.** **Clothing—Retail.** **MULLEN, BLUETT & CO., cor. Spring and First.** **Commissioners of Deeds.** **ARIZONA—NEW YORK, 414 N. Louisiana, 114** **N. Fort st., Telephone 28.** **Commission Merchants.** **ONTARIO FRUIT CO., No. 131 W. Fourth st.** **Deli-catessen Store.** **MENES RUNGKE & DOWNNEY, 244 S. Spring** **st., Roast Meats, Hams, Tongues, etc.** **Dentists.** **ADAMS BROS., DENTISTS, 33 S.** **Spring st., rooms 4, 5 and 20. Gold filling, \$2** **up; silver or amalgam, \$1; gold alloy, \$1 up;** **white filling for front teeth, \$1 up; gold and por-** **celain crowns, \$5 to \$10. Teeth without plates,** **\$10 to \$15 each; best sets teeth, \$6 to \$10. Teeth** **extracted for 50 cents; painless extraction, with** **gas air or local application to gums. Office** **hours, 9 a.m. to 5:30 p.m. Sundays, 10 a.m. to** **12 p.m.** **TOLHURST, DENTIST, 84 N. SPRING** **ST., rooms 2, 5 and 7. Porcelain Crowns \$5.** **Gold filling from \$2 up. Silver or amalgam, \$1** **up. Plates, from \$4 to \$10. Extracting, \$10.** **With gas or air, \$1. Bridge work a specialty.** **DR. L. W. WELLS, COR. OF SPRING** **and First sts., Wilson block (take elevator).** **Teeth filled painlessly; all kinds of dentistry** **done; teeth extracted without pain.** **PAINLESS EXTRACTION OF TEETH** **With the electric vibrator; gold and porcelain** **crowns; bridge work. DR. C. F. STEVENS,** **RMS., rooms 18 and 19, Schumacher block, No. 7** **S. Spring st.** **R. G. CUNNINGHAM, DENTIST, 31 N.** **Spring st., rooms 1 and 2, Phillips block.** **DR. C. V. BALDWIN, DENTIST, 30 1/2** **S. Spring st.** **Architects.** **CHARLES W. DAVIS, ARCHITECT,** **rooms 3 and 4, DOWNNEY BLOCK, Los An-** **geles.** **C. KYBOR, 250 S. WALSH, OCTAVIUS MORAN,** **KYBOR, MORGAN & WALLS, ARCHI-** **TECTS, rooms 1-4, No. 184 S. Spring.** **JOHN & SIOCCUM, ARCHITECTS,** **Office, 28 S. Main st., room 2.** **W. O. MERITHEW, ARCHITECT, NO.** **44 1/2 S. Spring st.** **I. HAAS, ARCHITECT, 14 NORTH** **S. SPRING ST.** **Oculist and Aurist.** **F. P. HOY, M.D., OCULIST AND AU-** **rist, late with Dr. Rogers and Dr. Norton of** **the Coast. Treats the eye and ear. Recular** **Office hours: 10 a.m. to 4 p.m., 7 to 9 p.m. 39 1/2** **Spring st., over People's Store.** **DR. A. F. DARLING, OCULIST AND** **Aurist. Office hours: 9 a.m. to 4 p.m., 7 to 9** **a.m. McDonald block, 25 Main st.** **Unclassified.** **SAVE SOME** **Very Valuable Literature** **Get Your Magazines** **—AND—** **Other Periodicals** **Thus making them handy for** **reference any time.** **MUSIC BOOK** **—IN THE—** **LATEST AND BEST STYLE** **With Index and Flexible Backs.** **Don't Send Your Work Away to Other Places** **—BUT—** **Patronize Home Industry** **And Let the Money be Spent Here.** **CALL AND SEE** **SPECIMENS OF OUR BINDING,** **Or send your order and address** **by postal card to** **THE TIMES-MIRROR CO** **Corner First and Fort Streets,** **LOS ANGELES, — — CAL** **N. B.—Country orders sent by ex-** **press will receive prompt attention.**

A SANTA FE WRECK.

ENGINEER KING MEETS WITH A HORRIBLE DEATH.

Special Passenger Train Runs Into a Landslide Near San Juan—The Passengers Escape—All the Lines Open—Tons of Freight Rolling In.

Railroad officials were looking smiling yesterday. Almost all the lines were opened and business is booming. On the Southern Pacific the Santa Ana and Santa Barbara divisions are the only roads that were not opened yesterday. The Santa Barbara line will be opened today and the Santa Ana tomorrow or day after. The Yuma division is all right and trains were running into the Wolfkill depot last evening, as the bridge across the Los Angeles River was completed yesterday afternoon. Yesterday afternoon 250 carsloads of freight came over the Yuma division. It has been tied up at Colton during the past few days.

The north bridge over the Los Angeles River was completed night before last, and the first train for San Francisco will leave the Wolfkill depot at 1:43 p.m. today. A train left San Francisco for this city last night, and will arrive here this afternoon at 4 o'clock. Yesterday afternoon 39 carsloads of beef cattle came in from Arizona over the Southern Pacific.

Two more carsloads of the Santa Fe's delayed passengers came in over the Southern Pacific last evening.

THE SANTA FE.

The Santa Fe people are straightening things out in great shape, and will have all their lines open today. The first engine went over the Los Angeles River bridge at 3 o'clock yesterday afternoon, and the east-bound train passed over the bridge at 3:30. It is possible that a transfer will have to be made in the Cajon Pass, but the damage was about repaired last night, and the train may get through.

Two trains full of people came in over the Santa Fe at 4 o'clock p.m. They came through the Cajon, but had to be transferred.

The Rivera bridge will be completed today, and regular trains will be run to San Diego tomorrow. Freight is piling in from all quarters, and the railroad people will be kept busy for some days to come.

A SANTA FE WRECK.

At 10:30 last night the special passenger train that left Orange for San Diego met with an accident five miles the other side of San Juan. The train was making good time when the engine ran into a landslide and jumped the track. Engineer King jumped and landed in the mud, and before he could pull himself out the engine fell on him and crushed him to death almost instantly. The fireman was more fortunate, as he jumped on the other side and escaped without injury. The coaches did not leave the track and no one else was injured. The passengers consisted of a gentleman and his wife and children. This is the first accident since the storm.

Engineer Sam King is the unfortunate who went down in the Arroyo Seco bridge wreck during the storm. He escaped death, but was injured by swimming ashore, and was transferred to the San Diego division.

Residence of A. D. Childress Burglarized—Culprit Captured.

The residence of A. D. Childress, the banker, at the corner of Adams and Thompson streets, was entered some time between 10 o'clock Monday night and 5 o'clock yesterday morning, by burglars, and a large amount of valuable silverware and some wearing apparel stolen. The family retired to the sleeping apartments, on the upper floor, at the usual hour, at which time the house was securely closed. All the indications point to the fact that the thieves had been watching from the outside for some time, and, waiting for everything to get quiet before they began work. The burglars first attempted to effect an entrance through the cellar, but in this they failed, and they then got in through the kitchen window, one of them having probably been helped through the window, when he opened the dining-room door and admitted the others. After satisfying themselves that everything was safe, the thieves proceeded to make themselves at home. They first took a substantial lunch, washed down with a decanter of wine that stood on the table, after which they proceeded to gather up everything of any value in sight. Sixteen silver teaspoons, four napkin rings, four silver goblets, a syrup pitcher and a saltcellar were got together and put in a valise which was found sitting in the hall. They then cleaned off the hat-rack, taking two overcoats, one belonging to Mr. Childress and the other to Mr. Thorn, his brother-in-law, together with three hats belonging to the latter gentleman and a handsome plush wrap belonging to Mrs. Childress, and lighting a lamp to see themselves safely out, they opened the dining-room door and made their escape.

The first known of the robbery was at 6 o'clock yesterday morning, when the servants came to the house, and as soon as it was discovered that there had been a burglary, Mr. Childress was notified, and he at once telephoned the fact to the police station. Chief Glass happened to come down to his office very early yesterday morning, and as soon as the news was received, he proceeded with Detectives Auble and Bowler to the residence, where a thorough investigation was made. The detectives then made a tour among the pawnshops and left a description of the stolen property, and about noon a man with the goods entered one of these places and tried to dispose of the goods. The police were at once notified, and Mounted Officer Houston was sent after the thief, and brought him, together with all of the stolen goods, to the station. At the station the fellow attempted to be very tactless, and refused to give his name, saying that Paul Jones would do very well for the register. He also declined to say whether or not there were any others implicated in the job. He finally admitted that his name was George Waley, and was locked up, charged with burglary.

During the afternoon Mr. Childress called at the station and identified the stolen goods as belonging to him. Every article taken was recovered, including Mrs. Childress's wrap, which that lady did not know was missing until it was turned up at the police station.

Christmas Tree.

On Christmas eve, at the St. Angelo Hotel on Grand avenue, near Temple, Lucile E. Kelly, the 8-year-old daughter of Mr. and Mrs. F. P. Kelly,

had her first Christmas tree, in the rooms of her parents. Beside the presents given to Lucile, most of the guests of the house placed their presents thereon, and the following persons were the recipients of favors on that occasion: Little Lesia Harsha, Mr. and Mrs. Harsha, Mr. and Mrs. Glover, Mr. and Mrs. Burdick, Mr. and Mrs. Boynton, Mr. Brewster and Mr. and Mrs. Bundy, Mr. and Mrs. Kelly. In some instances the presents were very valuable. Nearly every one received some token of the season. The guests of the house all joined in the festivities and a general good time was had.

ROBBERY.

The Mysterious Loss of Mr. Willey of Wilmington.

Last Sunday evening J. Willey of Wilmington went to bed, leaving a side door unlocked, in order that his son, who was out spending the evening, might get in without disturbing the family. The son returned about 11 o'clock, locked the door and went to bed. Not until the next morning was it discovered that \$108 in coin had been removed from the pockets of the father. The door was securely locked when the family awoke, and no trace of the thief could be found. Evidently the deed was committed by some one familiar with the habits of the family during the interval between 9 and 11 o'clock.

RESIGNED.

Mr. Higgins Makes a Change of Base.

M. R. Higgins, the secretary of the Chamber of Commerce, sent in his resignation yesterday, to take effect today. Mr. Higgins has resigned to accept the office of secretary of the State Viticultural Association, which was organized in this city several weeks ago.

Mr. Higgins is a most competent man. He took hold of the Chamber of Commerce when that institution was a mere infant, and he has built it up until it has become a power in the land. His friends are rejoiced to learn of his good luck.

Security Savings Bank.

Attention is called to the semi-annual statement of the Security Savings Bank and Trust Company, published in today's TIMES. This institution, which was established February 11, 1889, jumped immediately into popularity, and by July 1st had deposits aggregating \$107,000. This has since increased until, as shown in the present statement, it amounts to \$154,007.00. The Security is what its name implies, a safe as well as a popular banking institution. The officers are: F. N. Myers, president; S. A. Fleming, vice-president; J. F. Sartori, cashier. The directors are: Isaiah W. Hellman, T. L. Duque, J. F. Sartori, S. A. Fleming, O. W. Childs, A. J. Bowne, M. B. Shaw, J. H. Bartle, F. N. Myers.

POMONA.

Slight Damage by the Storm—Injury to a Corn Crop.

POMONA, Dec. 29.—[Correspondence of THE TIMES.] The Pomona Choral Union will present the original Gilbert and Sullivan comic opera, *Pinafore*, at the Pomona Opera-house next Friday evening, January 3d. The union has been rehearsing the opera for over a month.

The Pomona Pipe Works have secured a contract for three miles of irrigation pipe for Phoenix, Ariz.

The death of Mrs. T. W. Brooks, one of the oldest residents of Pomona, occurred at the same residence on Friday. The deceased leaves a husband in Pomona and relatives in Los Angeles to mourn her loss.

The number of eastern tourists at the Hotel Palomares has increased during the past 10 days, and the great building is now occupied by more guests than at any time in two years. A large influx of guests is counted upon as a certainty for early in January.

This is the gayest social season Pomona has ever had. The young people have given several balls at the Opera-house and also at the Hotel Palomares, and many more have been planned to occur previous to the Lenten season. Card parties and dinner parties take place almost nightly at private residences here. Our local orchestra has more than the usual amount of business nowadays.

E. T. Mitchell, an eccentric farmer near Rincon in this valley, had both of his little toes cut off by a Pomona surgeon on Friday. He has suffered with corns for years, and their pain increased so much that he has been unable to work in his fields on some days. He, therefore, decided upon amputation of the corn-affected toes, so off they came. It will be a month before he can wear a shoe without pain.

Editors Ward of the Pomona Times and Tinsley of the Pomona Progress will attend the editorial convention at San Bernardino early in January, accompanied by their respective wives.

A recent purchase of books for the Pomona Public Library brings the whole number of volumes now contained in that institution up to 2480. The library has in view the purchase of about 800 books before next June.

Within a territory of seven miles around Pomona not \$100 worth of damage has been done by the unprecedented rain and the consequent floods.

Mrs. Richard Gird will depart for a trip in San Francisco this week.

The matrimonial engagement of E. V. Morgan, a popular young civil engineer, and Miss Lizzie B. Overton, is announced.

The engagement of Ellis Vallikett, a typist in the Pomona Progress office, and Miss Laura Cooper, daughter of ex-Supervisor Cooper, is also announced.

APIARY.

An ex-county clerk of Ventura county is one of the largest apiarists of the Sinai Valley.

VENTURA COUNTY has the distinction of once having produced a crop of hoarhound honey, the bees feeding on the flower of that shrub. It spelt the flavor, apparently, at first, and there was no sale for it in the London market, where it was sent, but finally a druggist took it up for cough medicine and the whole lot sold at a fancy price for that purpose.

HONEY-MAKING is likely to change gradually in Southern California as time goes on, and the foothill region is more thoroughly settled up. Originally it was a species of isolated ranching, arising from the fact that it prospered so well in the mountain cañons, where the best feed was found for it, and it was called accordingly "bee ranching."

Later, however, bees have been extensively raised in the trade of the farmhouses generally, and it seems not unlikely that a large proportion of

the honey crop of the future may come from farmhouses rather than remote bee ranches.

It is a peculiar virtue of California honey that it does not give the colic as that in the East is wont to do. So common a thing is this that people as a rule are very careful of eating honey for fear of that result; here, however, a colic from that cause is so rare that people never give it a thought, and eat honey as any other food. The reason is, of course, the superior qualities of our native flowers, from which California honey is made.

S. L. WATKINS of Placerville has compiled a report of the honey product of the State, so far as he is able to get responses to inquiries, and finds a total of 1,092,900 pounds, or over 546 tons. He gets returns from 39 counties, including Los Angeles, San Diego, Ventura and Santa Barbara. San Bernardino and Orange have not reported. The largest producing county in the State is Ventura, with 220,000 pounds. She has 57 bee-keepers and 14,490 hives. Sage is reported as the food; the kind of hives generally used, Langstroth, and the bees Italian. San Diego is the next largest, with 200,000 pounds, 100 keepers and 17,000 hives. White, black and button sage is the feed, Harbison the hive, and the bees, all kinds. Los Angeles has 120,000 pounds, 45 keepers and 10,000 hives; feed, sage; hives and bees, all kinds. Santa Barbara has 40,000 pounds, with 30 keepers and 2350 hives. Thus the four counties have 680,000 pounds, or more than half the entire product of the State, and if San Bernardino and Orange were reported, the proportion would be still greater. The varieties of foods reported are alfalfa, clover, lilac, cedar, sage, manzanita, holly, willows, oaks, fir, alfalfa, buckeye, manzanita, etc., which shows the best to be so cosmopolitan in his tastes as he is industrious in his habits.

The Salt Lake City bottling car cash-boxes are accumulating lots of spurious nickels.

TOURISTS. Whether on pleasure bent or business, should take on every trip a bottle of Syrup of Figs, as it acts most pleasantly and effectually on the kidneys, liver and bowels, preventing fevers, headaches and other forms of sickness. For sale in 50-cent and \$1 bottles by all leading druggists.

AMMEN'S COUGH SYRUP never fails to give relief at once. Try it.

Unclassified.

1890

We wish Our Friends and

Customers a Happy and

Prosperous New Year.

May 1890 bring each of

you increased Comfort and

Prosperity.

MONTGOMERY BROS.,

JEWELERS,

18 North Spring Street.

Crown Cigarettes.

Cigarette smoking is justly considered a menace to the young generation of America. The evil influences of it may be noticed in the pale faces and nervous disposition characteristic of our youth.

A discovery has, however, been made in England recently, which, it is hoped, will help to diminish the great number of victims of the vice of cigarette smoking. This discovery is known as the

"CROWN CIGARETTE."

An article manufactured entirely from whole-some roots and herbs. Young men helplessly addicted to cigarette smoking should give the Crown Cigarettes a trial immediately. They will find that it restores vigor and health where the poisonous weed manufactured from tobacco and poisonous chemicals destroys it.

Crown Cigarettes are recommended by the leading physicians of Europe as a health-producer and an invaluable assistance to digestion. They help to ease the chest and promote expectation. When inhaled they are a sure cure for catarrh, colds, asthma and bronchitis.

C. S. RUGGLES,

267 North Main St.,

Agent for Los Angeles for Crown Cigarettes, which, even at this early date after their introduction in the United States may be had at all prominent drug and cigar stores.

Excelsior Steam Laundry,
Main Office, 15 West Second St.

TELEPHONE 367.

Our work is the best in the State.

We employ none but experienced help. Give us a trial and compare our work with that of others. All mending on gents' clothing done without extra charge.

Branch offices in all parts of the city. Our wagons call for and deliver work free.

FOR MEN ONLY!

A Positive Cure for General and Nervous Debility. Weakness of Body and Mind, and all troubles arising from early indiscretions. Robust health fully restored. Absolutely unfailing home treatment. Benefits in a day. Men suffer from 47 States, in territories and foreign lands. You can write them. Book, full explanation and proofs mailed sealed free. Address ERIC MEDICAL CO., BUFFALO, N. Y.

HOTEL DEL CORONADO.

The Ideal Winter Resort.

The Land of the Lily and the Rose.

LOCATED

So as to be constantly fanned by gentle breezes from the Pacific Ocean, the limitless expanse of which one never tires watching, or of gazing away off into Mexico—the land of mystery and romance. Here everything is full of brightness and beauty, and LIFE is a continual pleasure at this

Hotel del Coronado,
San Diego County, Cal.

The Most Remarkable

AND

MAGNIFICENT STRUCTURE!

On the Continent of America.

SUPPLIED With all modern improvements and every requisite for the luxurious enjoyment of rest. Comfort and retirement, such as physicians recommend to all, are here combined.

HOT SEA BATHS. Ready at all times, and excellent for rheumatism. Surf bathing, the finest tonic, can be indulged in all winter on the finest beach in the world.

Coronado Mineral Water,

A BOUNTIFUL Gift from nature's springs, pure and wholesome, stamps this as the God-favored spot of earth for invalids. This water is an infallible cure for kidney troubles. It has, besides, a beneficial effect on the whole system, and especially on that other important organ, the liver. In this water we have a pleasant beverage for ordinary use, a potent and delicate substitute for nauseous drugs and an excellent invigorating tonic for the whole body. Hundreds of cures have voluntarily given testimonials of its excellent medical qualities.

THE ONLY WATER used at the Hotel del Coronado is the Coronado natural mineral water.

TERMS. At the hotel, range by the month from \$2 per day and upward, according to room. The comfort of guests is most carefully watched.

Carpet House.

CARPETS.

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We have decided to sell every piece of goods in our establishment. In order to do we have marked down every article. Prices are no object. The stock must be sold at once. If you need Carpets, Curtains, Window Shades, Linoleums, attend our great closing-out sale. We are selling a splendid line of the following goods.

AT A TERRIBLE SACRIFICE!

Good Brussels Carpets : 55c a Yard.

Good Ingrain Carpets : 50c a Yard.

Good Body Brussels : \$1.00 a Yard.

Good Velvet Carpets : \$1.20 a Yard.

Good Mosaic Carpets : \$1.25 a Yard.

Window Shades at 25 cents apiece. Lace Curtains, Poles, Portieres, etc., in the same proportion. Call before purchasing. REMEMBER THE PLACE.

LION'S Leading Carpet House,

37 to 41 S. Main St., Los Angeles.

RETIRING FROM BUSINESS.

Walton & Wachtel,

Having Decided to Retire from Business, Offer

Their Entire Stock

—OR—

FURNITURE

In All Grades, from the Cheapest to the Best

Made in the United States.

AT COST!

This is the best opportunity ever offered in this city to parties who contemplate furnishing dwellings, offices, etc.

214, 216, 218 S. SPRING.

WE ARE NOT

Retiring from Business!

WE CARRY THE LARGEST, NEWEST AND BEST

SELECTED STOCK OF

FURNITURE, CARPETS, SHADES,

Curtains, Coverings, Etc.

WE WILL NOT BE UNDERSOLD.

LOS ANGELES FURNITURE CO.,

259-261 N. Main St., Opposite Baker Block.

JULIUS WOLTER.

Manufacturing JEWELER & WATCHMAKER,

Also Dealer in Diamonds, Watches and All Kinds of Jewelry. Fine Watch repairing. Any description of Gold or Silver Jewelry made to order and repaired. Old Gold and Silver made over, taken in exchange or bought. Fine gold and silver-plating. Mechanical Pipes and Holders repaired. 20 E. Main St., Los Angeles, Cal.

Races.

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Bats, Underwear, Etc.

A CHANGE.

We have decided to make a change in our lines, and to do that we have to make room immediately.

WE ARE CUTTING THE PRICES!

This Sale is for a Limited Time Only.

HALF : HOSE : FOR : MEN.

English Orkney Merino, reduced from 40 cents to 25 cents.
Fast Black Balbriggan, reduced from 35 cents to 25 cents.
All Wool Cashmere, reduced from 50 cents to 35 cents.
OTHER HOSE IN PROPORTION.

UNDERWEAR : FOR : MEN.

Natural Wool, reduced from \$1.50 to \$1.00.
Brown Cashmere, reduced from \$1.75 to \$1.25.
Best English Viscosa, reduced from \$3.50 to \$2.50.

GLOVES FOR MEN, \$1.00, \$1.25, \$1.50, \$2.00.

OUR HAT DEPARTMENT.

Knex Silk Hats, reduced from \$5.00 to \$4.50 | Schiller, St. Louis Silk Hats from \$6 to \$4.00
Philadelphia Silk Hats, " \$7.00 to \$5.00 | Black Cashmere Hats, " \$5 to \$3.50

DERBY (STIFF) HATS.

Knex Hats, reduced from \$5.00 to \$4.00 | Our Special, reduced from \$4.00 to \$3.00
John B. Stearns, reduced " \$5.00 to \$3.50 | Our Leader, reduced from \$3.50 to \$2

OUR PREMIUM

POTATOES - Early Rose, local, 1.50

Panorama Building,
Hallet & Hidden, Proprietors.

NO. 122 N. Main St., Los Angeles, Cal.
Prescriptions carefully compounded day or
night.

ing a board of directors for the ensuing year,
and for the transaction of such other business
as may come before it.

FOR \$25.50 CASH.
Address: **THE TIMES-MIRROR COMPANY,**
Times Building, Los Angeles, **CA**

A Very Valuable Work Which Should be in Every Family.

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The



Times.

Pasadena Edition.

BY MAIL, \$9 A YEAR.

WEDNESDAY MORNING, JANUARY 1, 1890.

BY CARRIER: PER MONTH, \$30 PER YEAR, \$312.

IN PASADENA
THE TIMES is served regularly by carrier, at an early hour every morning, to the residences and business places of citizens, at the same price charged in Los Angeles.

The Pasadena Edition is now published every day, and the matter on this page runs through the entire issue; so that Pasadena and her advertisers get the full benefit of the Times circulation.

The Times

PASADENA DAILY EDITION.
BRANCH OFFICE, No. 204 E. COLORADO ST.

EDITORIALS.

1890.

MANY happy returns of the day.
The year is dead. Long live the year!

THE diary and good resolution now start bravely off.

THE year past will be a dark one in history. Floods, accidents, fire and disaster seem to have been uncommonly prevalent.

Ho, for the tourney! If the sun shines this morning as it should, Sportsman's Park, on Los Robles avenue, will not hold the crowd.

THE roads are in running order again, showing a remarkably recuperative faculty on the part of railroad men. Even experts gave them another week to get things in shape.

THE belated eastern mail was delivered late last night, bringing much delayed information, joy and sorrow, to many. Tons of Christmas presents, it is said, still linger in the Cajon Pass, paying tribute to Jupiter Pluvius at the gates of his particular paradise.

The ball at the Raymond last night was the brilliant success that was expected, and was the most brilliant assemblage of dancers seen in Pasadena for a long time. Many of the costumes were very beautiful, and the general effect was striking in the extreme.

THE mistakes made in 1889 can be corrected in 1890. It is never too late to mend. This morning dawns on a season of rich promise. A full harvest is assured. The city looks well, is improving every day; in fact, things are moving forward, and 1891 will find Pasadena richer and better in every way. These are the signs of the times.

PASADENA CITY COUNCIL.

Meeting of the Board of Trustees Yesterday.

The Board of Trustees met in adjourned session yesterday morning and transacted the following business:

The minutes of the last meeting were read and approved.

The committee on streets and alleys reported in favor of closing Fulton street.

A resolution to this effect was passed.

A resolution of intention to widen Main street, between Fair Oaks and Raymond avenues, was passed.

The bid of J. P. Mushrush to grade Old Fair Oaks avenue was accepted.

A resolution and award of contract were passed and ordered published.

The committee on Fire and Water was instructed to direct the contractor to place the fire hydrants in accordance with contract.

Bids to grade Marengo avenue between California and Glenview were opened and read as follows:

O. S. Fisher, W. F. Forayth and Adam Becker, 38 cents per lineal foot; J. P. Mushrush, 32 cents per lineal foot, or 154 cents per cubic yard.

The bid of O. S. Fisher et al. was accepted and contract awarded.

Committee on Streets and Alleys recommended that temporary ditches be dug on Lake avenue to drain storm-water. Recommendation rejected.

The City Engineer was instructed to examine and report as to the condition of the grade of Colorado street, between Fair Oaks and Terrace drive.

Also of the condition of the grade and the street-car line on Fair Oaks, between Union and Dayton streets.

The Attorney reported that the city had the right to abate the nuisance at the corner of Raymond and Kansas streets, and the Superintendent of Streets was instructed to close the sidewalk in front of the lot on Raymond and Kansas.

A resolution was passed prohibiting parading and the use of musical instruments on the sidewalks, in the streets, without special permit from the Marshal, which will place all such applicants under police regulation.

The Attorney was instructed to keep a record of all street work.

The Clerk was instructed to formally notify the Attorney and City Engineer, as well as all others connected in any way with the city government, of all actions taken by the board, and all instructions given.

The Superintendent of Streets was instructed to procure and place the necessary poles for the United States mail boxes, still to be erected.

The committee on Fire and Water was instructed to report on fire-alarm matters at the next meeting.

A communication from L. Lion & Son in regard to the purchase of horses for the fire department was read and placed on file.

A communication from W. E. Arthur in behalf of Mrs. E. A. Foote, asking for damages sustained by storm water, was read. Referred.

A communication from A. W. Berry, asking for a rebate on taxes in the sum of \$17.27, was read, and, on motion, ordered paid.

A petition for rebate of taxes from the West Coast Lumber Company for \$2.17, and one from the L. W. Blinn Lumber Company for \$1.27, were received, and ordered paid.

Committee on Fire and Water asked for further time in which to report on the contract with the Electric Light Company.

The Council then adjourned to meet Saturday, January 4.

PERSONALS.

W. S. Gilmore is again about, after several days of illness.

James G. Rossiter will open a law office soon in Pasadena.

James L. Patterson of Calico registered at the Webster yesterday.

C. S. Harrison of Oakland is a visitor in the city. He is the cousin of President Harrison.

J. R. Mitchell of La Mar, Iowa, arrived from the East on Monday evening, and is stopping at the hotel.

Hancock Banning of Los Angeles drove out from town yesterday on business and was exchanging New Year compliments with friends.

TODAY'S RODEO.

THE TOURNAMENT—ARE YOU READY? GO!

Horses, Men, Bicycles, Boys, Girls, Ponies and Burros—The Great Event After Days of Excitement.

For the last two days the grounds of the Sportsman's Park on North Los Robles avenue have been crowded with those who propose entering the now famous tournament. The ground has been put in shape by Superintendent of Streets Vore, and a fine race-track awaits the flyers this morning.

Yesterday fast horses went round the track like mad, Mr. Volkmar, Mr. Senter, Dr. Rowland, Mr. Vore and Whit Elliott putting their

place among all the hunt clubs of the East, and from the interest taken is evidently going to be a success here.

The hunt owns among its members some of the finest grey and stagbushes in the country, those of Mr. Outhwaite, Dr. Rowland, Mr. J. de Barth Sherb, Jr., and Mr. Bandini being the best known. The club has also a pack of fine foxhounds which are used at hunting the fox, coyote and wild cat. They came from the famous Rose Tree Hunt in Media, Pa.

The meets of the hunt and the exciting sport have often been described in THE TIMES, and the St. Nicholas of November has an illustrated article telling the complete story of a day with the hunt club.

PROGRAMME.

The order of exercises today will be as follows:

1. Men's foot race.

2. Boys' foot race for 15 years and under.

3. Men's foot race, 220 yards.

4. Hurdle race, 130 yards.

5. Orange race.

6. Bicycle race.

7. Boy's foot race, 10 years and over.

8. Boy's pony race, 1/2 mile.

9. Burro race.

10. Girl's pony race.

11. Burro race, 1/2 mile.

12. Polo game on burros. Pasadena vs. Raymond.

13. Half mile dash for horses.

14. Tag of war.

15. Knight's ring tourney.

The first event will start promptly at 10 p. m., entrance on Los Robles avenue, and, as the programme is a long one, the races will be pushed as much as possible. The prizes are many and handsome, there being two or three, it is believed, for each event, a list of which was given in THE TIMES of yesterday. The various societies of the city, the Pickwick Club and Bicycle Club have cooperated with the Hunt Club to make the event a success.

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influence was brought to bear upon the gentleman who was to have ridden her, and another lucky person will take his place.

All the old chaps who looked on at the tournament practice yesterday wished they were young again.

Mamie Gertrude Pierce is the favorite for the little girls' pony race. If that pony gets started he will come in with the diamond and pearl brooch.

Miss Pierce rides the famous pony Bob, and her rose is the Mareschal Niel.

Clayton Raymond is on deck this morning, and don't you boys forget it. Mr. Mastafa's "Bob" showed up in good form yesterday. Mr. Senter proposes to bring him in near the front today.

Buy your tickets at Wetherby & Kayser's, before you go to the grounds, and save time.

The charge of horses at the rings is a pretty sight.

The flat race will not be flat. Some runners are down for it.

The best place to see the entire proceeding will be the grand stand.

A judges' stand has been placed opposite the grand stand.

The victors will have the prizes given them at the grand stand immediately after the race.

Odds of 40 to 1 are offered that the burro "Mr. Maginty" will either win the race or eat up the grand stand.

An "Anxious Inquirer" asks if a burro rider can dismount and carry the

burro—until he is rested. Decidedly no.

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A duarte tug of war team is coming down. Good for Duarte.

The Pickwick Club offers two challenge cups for foot-races, one for 220 yards and the other for a mile.

Bring all the flowers you can. Poppies, roses, all of them, and pile them up on the stands—the judges' stand and every where.

Mr. H. R. Hertel donates a fine silk miniature case as a prize.

A foot-ball team will have a game.

Death.

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THE RAYMOND BALL.

Masked Figures—Brilliant Assembly at the Hotel Last Night.

The Raymond masquerade ball terminated the carnival festivities at the great hotel last night, and was the success of the season.

A large number of invitations were extended, and the result was a crush of no ordinary dimensions. By 8 o'clock masked figures began to come in, and an hour later the parlors were well filled with a curious assemblage.

Here was Mrs. Jarley talking to Mephistopheles, Richard in a quiet confab with Hamlet, a fairy laughing with Mr. Rox, while captains of the guards, dukes and many more, mingled in the throng as natural as life. The masks were removed, and the invited guests from Pasadena were: Mr. and Mrs. Haribut, Miss Haribut, Mr. and Mrs. Seymour E. Locke, Miss Greenleaf, Mr. and Mrs. Webster Wotkins, Mr. and Mrs. Loda, Miss McBride, Mr. and Mrs. S. Taylor, Mr. and Mrs. C. F. Holder, Mr. and Mrs. C. R. Crane, Mr. and Mrs. Louis Blankenhorn, Mr. and Mrs. Daggett, Mr. and Mrs. Walter Wotkins, Mr. and Mrs. Buel, Mr. and Mrs. Scoville, Mr. and Mrs. Granger, Mr. and Mrs. H. J. De Barth Sherb, Jr., Mr. and Mrs. Devereaux, Mrs. Kimball, Mrs. Mitchell, Mr. and Mrs. May, Dr. and Mrs. Channing, Miss Channing, Mrs. Outhwaite, Miss Boyle, Mr. J. W. Outhwaite, C. S.

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NEWS AND BUSINESS.

The Weather.
SIGNAL OFFICE, LOS ANGELES, Dec. 31.—At 5:07 a. m. the barometer registered 29.95; at 5:07 p. m., 29.93. Thermometer for corresponding periods, 47, 52. Maximum temperature, 50°; minimum temperature, 40°. Weather, cloudy.

INDICATIONS.
SAN FRANCISCO, Dec. 31.—[By Telegram to THE TIMES.] Forecast for 1890. Wednesday. For California: Rain in Northern California; fair weather in Southern California.

Mexico Triumphant.—Don Jose Pera, a well-known politician of Mexico, states that himself and many of his friends are pleased to learn that Southern Californians are becoming so attached to Mexico that they are universally using Mexican Tonic for constipation, dyspepsia and kindred troubles; and without exception pronounced it infallible. It is one of the few really good preparations in the market, sold by druggists generally; \$1 a bottle.

The new snowfall of the Central Pacific Company, westward from a bank of hard snow near Truckee last Thursday is fast high and necessary for a mile long in just 40 minutes.

The finest line of candy baskets and boxes ever seen in Los Angeles; just the thing for New Year's. Merriam & Co., 31 South Spring street.

Salt Lake city's real estate has increased in value since Judge Anderson gave his decision against the Mormons.

Perfection in ladies' foot dress. Taylor's patent adjustable shoe. Please call and examine at 294 South Spring street, room 6. Grapevines are being set out extensively by the farmers on the Otay mesa. San Diego County. They are not afraid of the yield turning to raisins before it is picked.

For a holiday goods in Decorated China, Japan, Glass, Biscuits, Ornaments, Nickel and Silver Ware, Lamps, or anything in Crocker, go to Z. L. Parmelee's, 110 and 112 North Main street.

Mexican Tonic for the blood. "Let's trade off the citrus belt," says the Greenville Mercury. "For a pair of gum boots, a rubber coat and an umbrella."

Finian Haddies, fresh, at H. Jevne's, 33 and 35 North Spring street.

Plano's cold and easy installments, at C. E. Day's music store, 8 North Spring street.

The indications are that cranberries will sell at high figures the coming season, as the crops in Oregon and Washington are very light.

New Raisins, Currants, Citron, Orange and Lemons feel arrived at H. Jevne's.

Maudslayi Java Coffee is not generally obtainable, but can always be found at H. Jevne's.

Keno politicians want the Nevada Mint now at Carson to be moved to their town. Fancy Butter, at H. Jevne's.

Mexican Tonic cures constipation. The ice-making plant at San Luis Obispo has been sold to a company at Port Townsend.

Send 10 cents for \$1 and we will send you by express a one or two-pound box of our choice candies. Merriam & Co., 31 South Spring street.

An agricultural college will be started in Los Angeles, N. M., next January. Coach Candles at H. Jevne's.

Mexican Tonic cures dyspepsia. When San Diego shall have 100,000 population, Los Angeles will have 50,000.

Supplies for the Christmas table, at H. Jevne's, 33 and 35 North Spring street.

The old reliable Chickering pianos, at C. E. Day's music store, 8 North Spring street.

Day's music store, 8 North Spring street. Tack, N. M., wants a bank. It takes 30 days to get money in that town on a gilt-edged draft.

Sommer pianos, best in the world. Charles E. Day, 8 North Spring street.

First-class service in the grocery line. H. Jevne's.

The real estate transfers at Tacoma for the year amounted to over \$1,000,000.

Mexican Tonic for the blood. Three and a half pounds Jevne's combination coffee for \$1.

Pianos and organs to rent. Charles E. Day, 8 North Spring street.

H. M. Taylor of Riverside has set out 10,000 strawberry plants to feed the Northerners.

Mexican Tonic cures constipation. Lovers of the Orange can be seen at H. Jevne's, 33 and 35 North Spring street.

The Cajon Star has gone to heaven. Manicure, for fine puddings, at H. Jevne's.

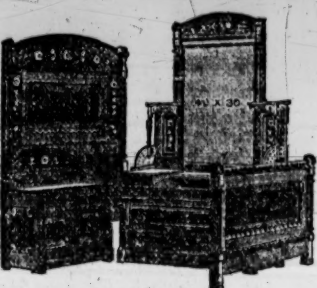
Mexican Tonic cures dyspepsia. GENUINE ANTHRACITE COAL for sale at the New Mexico Coal Company. General office in the Nadeau Hotel. Yards on First street.

CULVER'S CARBOLIC SALVE—magic healer—cuts, bruises, burns, etc. 25 cents.

Children Cry for Pitcher's Castoria.

LOOK AND READ!

If you wish to sell or buy secondhand Furniture, Carpets or Trunks.



Be sure and give us a call. We have in stock a large variety of goods too numerous to mention, all of which we offer cheap for cash or will sell on installment.

W. P. MARTIN & BRO., No. 349 S. Spring St. Lock Box 1291.

SOUTH-FIELD

Wellington Coal.

The best fuel for domestic and steam purposes is the South-Field Wellington Coal.

FOR SALE BY HANCOCK BANNING, Wholesale and Retail Dealer in WOOD, COAL AND CHARCOAL.

Office, 109 North Main Street. Telephone No. 33.

Yard at Junction of San Fernando and Railroad Sts. Yard Telephone No. 142.

SPECIAL

Important Announcement

TO THE LADIES OF THIS CITY AND VICINITY. From the Manufacturers of the World.

TAYLOR PATENT ADJUSTABLE LADIES' SHOE.

Ladies are cordially solicited to call at the office of our agent, 294 SOUTH SPRING ST., ROOM 6, and examine the best and most comfortable ladies' shoe in the world.

O. M. PARTHEDON, General Agent, 294 South Spring St., Room 6.

Send for Circular.

JOSEPH DIFUSI, THE ONLY—

Instrument Maker

Repairer of all kinds of String Instruments. Repairs Bases and Accordion. Work warranted. Superior Strings and Musical Merchandise. Old Violins, Banjos, etc., for sale at low prices. Mandolins in the world for sale at a low price.

MANUFACTURER OF

UPPER AND LOWER PARTS

Repairing and Reconstructing a Specialty in all styles.

Best quality of staves received from New York for new and old strings and bows.

First-class workmanship guaranteed. New umbrellas made to order in less than two hours.

No. 17 W. Third St., Between Spring and Main.

NIBSET'S

Tonic Poultry Powder

Is the only preparation that will keep fowls in perfect health.

And at the same time increase the production of all leading poultry raisers. IN USE 19 YEARS.

If your grocer or druggist does not keep it send for circular giving prices by mail or express prepaid.

J. N. NIBSET, P. O. Box 78, Los Angeles, Cal.

Office, 220 S. Main St., Upstairs.

WINTER CLOTHING.

Abernethy & Taft

ARE NOW READY FOR THE HOLIDAY TRADE.

And as they are selling FOR CASH, do not fear competition. Please call and see them.

NO. 19 SOUTH SPRING ST., LOS ANGELES, CAL.

Notice to Creditors. ESTATE OF CAREY M. BLAKES.

Noted, deceased. Notice is hereby given by the undersigned, administrator of the estate of Carey M. Blakes, deceased, to the creditors of and all persons having claims against the said deceased to exhibit the same with the necessary vouchers within four months after the first publication of this notice to the said administrator, at the law office of Deane & Burdett, corner of 12th and 13th streets, in the city of Los Angeles, for the purpose of settling the claims of the said estate in the city and county of Los Angeles.

Medical.

DISEASES OF THE HEAD, THROAT, LUNGS,

Successfully treated by **M. HILTON WILLIAMS,**

M. D., M. C. P. S. O., By his Hot Air Medicated Inhalations and his COMPOUND OXYGEN TREATMENT.

CATARH and CONSUMPTION, etc., are now conceded by all scientific investigators to originate from a living germ or parasite so small as to be invisible, except when placed under a powerful microscope.

Our hot air medicated inhalations absolutely kill and destroy every living germ, millions of which are found floating in the expired air, or after the death of the patient found imbedded in the mucous surface lining the air passages, while the compound oxygen anhydrous and thoroughly removes every poison of the system from the blood, no matter from what cause it exists or how long it has continued, and is efficacious in the cure of Catarrh, Throat Inflammation, Asthma, Bronchitis, Consumption, Nervous Prostration, Insomnia and Dyspepsia, etc., together with any poisoned condition of the blood.

In all cases of catarrh and other diseases of the Respiratory Organs, where the system suffers from the deleterious effects of scrofula or other vitiated condition of the blood, local treatment is invariably combined with constitutional remedies.

Persons desiring treatment by this system of medicine can use the remedies at home as well as at our office, and which will cause no inconvenience or hindrance to business whatever.

Those who desire to consult with me in regard to their cases had better call as the office for an examination, but if impossible to visit the office personally, a questionnaire and circular, both of which will be sent free of charge. Address

M. HILTON WILLIAMS, M. D., 57 S. Fort St., Los Angeles, Cal.

OFFICE HOURS.—From 9 a. m. to 4 p. m. Sundays—From 10 a. m. to 2 p. m. Residence, 15 South Grand ave.

sbbs.

If any dealer says he has the W. L. Douglas's shoe without name and price stamped on the bottom, put him down as a fraud.



W. L. DOUGLAS

\$3 SHOE FOR GENTLEMEN.

Best in the world. Knease his \$5.00 GENUINE HAND-SEWED SHOE. \$4.00 HAND-SEWED WELT SHOE. \$3.50 POLICE SHOE. \$2.50 EXTRA LEATHER CALF SHOE. \$2.25 WORKING MAN'S SHOE. \$2.00 ROYAL SHOE. All made in U. S. Button and Lace.

W. L. DOUGLAS

\$3 SHOE FOR LADIES.

Best Material. Best Style. Best Fitting. If not sold by your dealer, write to W. L. DOUGLAS, Brockton, Mass. Examine W. L. DOUGLAS' \$3 Shoe for Ladies and Gentlemen.

THE MASSACHUSETTS

Boot and Shoe House

23 WEST FIRST ST. SOLE AGENTS FOR LOS ANGELES.

MEXICAN TONIC.

The Dyspeptic, the Debilitated and those Suffering from Constipation will on trial find that the

Mexican Tonic Is a Specific.

We have numerous testimonials from people who have been cured.

SOLD EVERYWHERE.

The MORGAN OYSTER CO.,

PLANTERS AND WHOLESALE DEALERS IN ALL KINDS OF

Fresh Oysters.

Packers of the Celebrated "Eagle Brand" Fresh Canned Oysters.

The best in the world. Put up daily for the interior trade.

Depot: 612, 614, 616 Third St., SAN FRANCISCO.

LOS ANGELES

WAREHOUSE,

205-209 S. Los Angeles St., CORNER THIRD.

Location and accommodations make this the most convenient place for storage of all kinds. Telephone 207.

Ladies, Attention!

DRESSMAKING MADE EASY

Finest Finished Cabinet

PHOTOGRAPHS.

Auction Sales.

"THE DIAMOND HOUSE."

ROTH & SON.

Auction Extraordinary.

\$80,000 WORTH

—OR—

Diamonds, Watches, Jewelry, Solid Silverware and Silver Plate, Bronzes, Statuary, Clocks in genuine Pariah Marble Cases, Gold and Silver Headed Canes, Rings set with Diamonds, Emeralds, Bloodstones, Sapphires, Emerals, Onyx, Carnellans, Topaz, Rubies

Every article in this immense stock is STRICTLY FIRST CLASS. You must not be sold. THE SALE IS POSITIVELY WITHOUT RESERVE, regardless of cost or value. Sale to commence

MONDAY, 9th Inst.

Opp. Nadeau House, Wilson Block. By order of ROTH & SON.

GENERAL AUCTION

—AND—

COMMISSION HOUSE.

W. E. BEESON,

119 & 121 W. Second St., Between Spring and Fort Sts.

AUCTION, STORAGE & COMMISSION.

PEREMPTORY SALES OF

New and Secondhand Furniture, —OR—

Tuesday, Dec. 31st, Thursday, Jan. 2d, and Saturday, Jan. 4th.

At 10 a. m. and 2 p. m.

Horses, Buggies, etc., every Saturday at 10 a. m. Outside Sales made on application.

B. N. O. RHODES, Auctioneer.

Unclassified.

Hotel STEWART,

San Bernardino, Cal.

UNDER NEW MANAGEMENT.

The Finest Hotel in Southern California.

FIRST-CLASS IN ALL ITS APPOINTMENTS. Table supplied with the Best Market Produce. Rooms, 100 to 150. Well Lighted. Ventilated and Elegantly Furnished.

JAS. C. BUIK, P. R. CALDWELL, Proprietors.

CROWN MILLS

EXTRA FAMILY NEW PROCESS PATENT ROLLER FLOUR.

Use the Celebrated "CROWN FLOUR."

For Sale by All First-Class Grocers.

Excelling by no other brand.

We are making suits to order of the fine Huddersfield Worsted for \$25 which are during the past three weeks have proved such an immense success in San Francisco, we concluded to give the benefit to the people of Los Angeles. We have purchased \$40,000 worth of these Huddersfield worsteds and have added a large line of Kentucky and Maitland overcoats, made to order, with silk linings, for \$25 to \$30, which would cost elsewhere at least from \$40 to \$50. We have received from the mill over 40 pieces of the finest Trousering, which we bought at an immense reduction, and are now prepared to give our customers and other patrons the benefit of these bargains. These are the ALL WOOL goods at prices never before known in Los Angeles. Please call and examine the goods and be convinced of the bargains now offered for the holidays.

Joe Poheim, the Tailor,

49 & 51 South Spring St.

\$3 — FOR — 12

WE GUARANTEE THEM AS FINE AS any made in the city. Bring the babies early. N.B.—Parties holding contract tickets on other galleys will be allowed \$1 for the same on their order.

WESNER, 21 W. First St.

MRS. DR. WELLS,

FIRST LADY LICENTATE OF

Kentucky. Educated abroad. Thirty years in and citizen of the United States. Many years successful practice in this city. Uterine and Rectal diseases treated with skill by new methods without knife or caustic. Prompt relief in suppressed or painful menstruation. In Protrusion, Ulceration, Congestion, etc., trial will convince. Weak nervous, debilitated women find a cure at once. Delicatest of delicate of human system. Consultation free. 42 SOUTH FORT STREET.

NEW HOUSE.

Wagon Material, Hard Woods,

Clothing—Mullen, Bluett & Co.

MULLEN, BLUETT & CO.,

N. W. Corner Spring and First Sts.

Discounts for Cash.

We are not "Retiring from Business," but we must make room for Spring Stock, and we will give until February 1st

20 PER CENT.

Discount on all Men's, Boys' and Children's Overcoats.

10 PER CENT.

Discount on everything in our full line of Suits for Men, Boys and Children, Furnishing Goods, Hats, Valises, Etc.

Profits Sacrificed,

And you get the benefit, as our goods have not been marked up to meet the loss.

MULLEN, BLUETT & CO.

Diamonds, Jewelry, Etc.

S. NORDLINGER,

Diamonds, Watches,

130 N. MAIN ST. Los Angeles, Cal.

A Most Complete Line of Novelties for the Holidays

CAN BE SEEN AT OUR ESTABLISHMENT.

Diamonds, Watches, Jewelry, Clocks and Bronzes of all the latest styles and descriptions. Our stock is the largest in this town, but we are not overstocked. No auctions or selling out below cost, but we guarantee our prices lower than any other house in California. Our standing of 21 years in this town is a guarantee of fair treatment.

WOODBURY'S BUSINESS COLLEGE

AND

Short-hand & Typewriting Institute,

159 South Spring Street, Los Angeles, Cal.

A Leading Exponent of Practical Commercial Education Devoted to the Preparation of Young Men and Women for the Duties

of Active Business Life.

Its course of study embraces only those branches of knowledge which are absolutely necessary to success in life, and a few months afford ample time in which to acquire such knowledge.

The faculty is composed of teachers eminent for their attainments and experience in their specialties.

The course of study has borne the test of years, and has been found pre-eminently adapted to the wants of those desiring such preparation as it confers.

Its patronage is composed of an older, more mature and more cultivated class of young men and women than that of any other commercial school.

Its graduates have been found competent, have been sought by business men, and are the tireless advocates of the institution.

Its attendance is very large, is steadily increasing, and is composed of young men and women of education, ability and ambition from all parts of the State.

Its rooms are pleasant, well lighted and ventilated, and the best furnished of any college in California.

Its catalogue, containing description of course of study, rates of tuition, etc., will be mailed to any address, free, by addressing

F. C. WOODBURY, 159 South Spring St.

CRANDALL STOVE & MFG CO.,

Removed to 124, 126 and 128 South Spring Street,

—HAVE—

Alaska Refrigerators! **SUPERIOR RANGES!**

DRY AIR PATENT. The Only Perfect Working Range in This Market.

TROPIC GASOLINE STOVES! GUARANTEED TO GIVE SATISFACTION.

NILES PEASE,

—IMPORTER AND DEALER IN—

FURNITURE, CARPETS, LINOLEUMS,

Oilcloths, Mattings and Window Shades,

243, 245 & 247, SOUTH SPRING STREET.

CRANE BROS. MANUFACTURING CO.,

—MANUFACTURERS OF—

PIPE, FITTINGS, BRASS GOODS, TOOLS, PUMPS, HOSE

PACKING AND SEWER PIPE,

Plumbers' and Gasfitters' Material in Every Variety.

NOS. 13, 20, 22 & 24 BEQUEVA ST., COR. LOS ANGELES.

GUST. KNECHT

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NINTH YEAR.

LOS ANGELES, WEDNESDAY, JANUARY 1, 1890.—TWENTY-THREE PAGES.

Sacoby Bros.—Clothing.

OUR GREAT

ODD AND END SALE!

We have just completed our annual stocktaking, and on going through each department we have laid aside all the broken lines we could find and placed them on our Odd and End counters, intending to clear them out at one sweeping reduction in price that would make our Odd and End Sale one long to be remembered. We have just completed our task, and today we inaugurate our mammoth

ODD AND END SALE!

We ask everyone to step in and see us, go through each department and learn our prices and see the reductions we have made. It is no trouble for us to take you through the house and show you our many bargains.

WE ARE DISPLAYING:

Odd sizes in Chinchilla Overcoats.

Odd sizes in Cassimere Overcoats.

Odd sizes in Melton Overcoats.

Odd sizes in Cape Overcoats.

Odd sizes in Boys' Overcoats.

Odd sizes in Children's Overcoats.

Odd sizes in Youths' Overcoats.

Odd sizes in Men's Corkscrew Suits.

Odd sizes in Men's Wide Wale Suits.

Odd sizes in Men's Cassimere Suits.

Odd sizes in Men's Cheviot Suits.

Odd sizes in Young Men's Cassimere Suits.

Odd sizes in Men's Cheviot Suits.

Odd sizes in Boys' Cassimere Suits.

Odd sizes in Boys' School Suits.

Odd sizes in Boys' Jumper Suits.

Odd sizes in Children's Suits.

Odd sizes in Men's Doeskin Pants.

Odd sizes in Men's Fancy Worsted Pants.

Odd sizes in Men's Cassimere Pants.

Odd sizes in Men's Cheviot Pants.

All Our Odds and Ends

—WILL BE—

MERCILESSLY SLAUGHTERED!

We are determined to close them out, and the prices have been cut deep to make them move quickly.

Sacoby Bros.

RETAIL DEPARTMENT,

121 to 127 N. Main Street.

Unclassified.

BEECHAM'S PILL

THE GREAT ENGLISH MEDICINE
For Weak Stomach—Impaired Digestion—Disordered Liver.
SOLD BY ALL DRUGGISTS.
PRICE 25 CENTS PER BOX.

Prepared only by THOS. BEECHAM, St. Helens, Lancashire, England.
B. F. ALLEN & CO., Sole Agents
FOR UNITED STATES, 365 & 367 CANAL ST., NEW YORK.
Who (if your druggist does not keep them) will mail Beecham's Pills on receipt of price—but inquire first. (Please mention this paper.)

HOWLAND & CHADWICK,

Wholesale Dealers in PHOTOGRAPHIC SUPPLIES.

Have Removed to 109 South Main St., Opp. the Cathedral.

A Full Line of KODAKS and AMATEUR OUTFITS, Suitable for Holiday Presents.

HORTICULTURE.

THE VARIED PRODUCTS OF OUR WONDERFUL SOIL.

Fruits of All Climes and Zones—The Orange and the Apple Side by Side—Large Profits to Careful Cultivators.

FOR several years past horticulture has been coming more and more to the front as the leading industry of the State. At the present rate, of progress, it will not take many years before the admitted precedence of this industry will be so marked that it will be a subject for wonder that any one could have ever doubted that such would be the case. When it is remembered that the United States imports annually fruits and nuts to the value of nearly \$20,000,000, it will readily be seen that the field for this industry is immense. There is practically no limit to the markets for our fruits, green, dried and canned. We have the world for our market.

Fruit trees of most descriptions are thoroughly at home in Southern California, some varieties more especially so in one section than another. They grow vigorously and luxuriantly, commencing to bear at a remarkably early age, and continuing to produce ever-increasing crops for many years, as may be seen by a visit to some of the Old Mission gardens. There are bearing orange and pear trees in these gardens over a century old.

During the past five or six years the shipment of fruit East has assumed great proportions. For every carload of fruit which formerly left for the East, a whole trainload is now shipped. Rates of freight have come down considerably, which has much helped the growers. Southern California has the great advantage of being able to grow to perfection fruits which cannot be successfully raised elsewhere. In Southern California may be seen growing in the same orchard the orange, lemon, pear, apple, peach, apricot and almond, as well as the finest foreign grapes.

Last year the acreage of bearing fruit trees in Los Angeles county was given at 37,450 acres. Many large tracts, have been planted to orchard during the past year, but on the other hand the mysterious vine disease—the mildew—has destroyed a large area of vineyards in the county, so that the net acreage of bearing orchard and vineyard in the county has not been greatly changed. After allowing for orchards that have come into bearing during the past year, and the loss of vineyards, the net acreage of bearing orchard and vineyard in Los Angeles county is estimated at 35,000 acres.

The orange naturally takes the first place in a discussion of the fruits of Southern California. It is the fruit upon which most of our fame as a horticultural region rests; indeed, there are many abroad who hold the erroneous idea that the orange is about all that we can raise in this section. The orange industry of Southern California, it is true, bids fair soon to assume national importance. The growers of Riverside alone received over \$1,000,000 for last year's crop.

It will not do to suppose that every portion of Southern California is adapted to orange culture. Quite the contrary, as those who think so will find, to their cost, if they put their theories into practice. Good orange land is cheap at \$200 an acre, while there is plenty of ordinary land in Southern California which may be bought at from \$30 to \$50 an acre. The orange is very particular in its tastes. Almost every locality will grow an orange tree, but when the fruit comes to be flavored and colored, then comes the test of citrus conditions. Land that has so much water in it, so near the surface that irrigation will not be required, is too cold for the orange. Some gravelly land is not objectionable. Such conditions will color and flavor the fruit to perfection.

As to the cost, expenses and profits of an orange orchard, avoiding wild figuring, it may safely be said that the facts are good enough for any reasonable man.

In an ordinary year 2-year-old budded Navel trees, on 3-year-old roots, may be purchased at \$1. The following is an estimate of an average cost of a 10-acre orange orchard, three years from planting:

Ten acres of land.....	\$2,500
Preparing the ground.....	100
One thousand trees.....	100
Planting complete.....	50
Water, first year.....	300
Care of orchard, first year.....	300
Incidentals.....	70
Total.....	\$3,820

The two following years, counting interest on investment at 5 per cent., will cost..... \$1,320
Cost of an orchard at 5 years old from seed..... \$5,220
At the end of the third year, the orchard will bear enough to pay the investment at 10 per cent., and ought to do a good deal more than that. In two more years it will pay for itself from one to one and a half boxes to the tree, which, at present prices, would amount to from \$4000 to \$6000 for the product of the orchard. From that figure it would gradually advance. As much as \$8000 an acre has been realized from full-bearing orange orchards. Leaving aside exceptional cases, it is safe to estimate the net profit of a 10-year-old orange orchard, planted to the best varieties and carefully tended, at \$500 an acre, or \$5000 a year from 10 acres. There are certainly very few industries which can show equal returns for a like investment.

Among the actual results which have been obtained from an orange grove, may be mentioned a gross receipt of \$8000 from a 20-acre orchard of 5-year-old trees, and one of \$4000 from a 10-acre orchard of 3-year-old trees.

There are many who fear that the orange market may soon be overdone, and that the price will fall below that of the present year.

In answer to your inquiry as to the views of the press and prospect of the market for California oranges, we would say, we think the prospects for the future are bright indeed.

The orange from California arrives in our market at the season of the year when the appetite of the public has a stronger craving for oranges than at any other season; and also after the bulk of the Florida crop is marketed, and for that reason there is but little if any competition between the California and Florida fruit. The year 1889 really has no competition to meet except with the Valencia and Sicily fruit; and as the quality and general appearance of the California product is so far superior to the foreign fruit it brings much better prices in this market.

Another point in its favor is that your crop is not for market until after the severe cold weather is over, and there is no danger of freezing in transit.

Being able to hold your fruit on the tree until the season of frost, until it is for your interest to ship, you have a great advantage over the grower of the Florida crop. Coming at a season when oranges are scarce, and when there is a scarcity of all other green fruits, we believe consumers will be ready to pay a high price for your fruit.

We do not believe the time will ever come in this country when you will produce too many oranges, especially the famous Riverside Washington Navel, St. Michaels, Malta, Bloods and seedling. We judge that the consumption of oranges the last 10 years has been about 300 per cent., and we see no reason why it should not fairly raise the next 10 years. The Washington Navel, especially, is an orange that sells at very high prices, and for that reason must be profitable to the producer. Ten years ago oranges were a luxury, today they are a necessity, for the great masses of the people are now eating them daily, and for that reason we do not believe it possible that the production of good oranges will ever be too large for the market.

By JAMES H. WATSON, Treasurer, PORTER BROS. COMPANY.

Thacker Bros. write: In answer to your inquiry as to the state of California orange industry we say that we have always been strong believers in the value of California oranges. During the season we handle no others. No California oranges, however, should be sent to market until they are of the best quality. The reputation of the fruit, if not being ruined, as a consequence, sour fruit will not be sold.

February and March are very early months for oranges to be sold must sell for less. California has a big advantage in this respect. Covering all cuts and shipping, everybody else fruit and not much to be had.

There is a danger of overproduction in the West very rapidly, and the California market is extending. The fruit is found in the East in large quantities through the East. The fruit must be kept below the price of the foreign fruit, and the importation last season was very large.

The lemon-growing industry is less likely to be overdone than that of the orange, the area of possible production being much smaller. There are large profits in the business for the man who goes into it with judgment, perseverance and capital. The lemon is a staple article, lemon juice entering largely into manufactured products—limes, syrups, and other foodstuffs. Los Angeles county could easily supply the United States with lemons.

This is a dwarf tree or shrub, with the cultivation of which little progress has been made in Southern California. Like the lemon, it is very susceptible to frosts, and for this reason some of those who attempted to raise it in the early days failed to make a success. Some of the best lemons are raised in localities have done well, and enough has been done to show that lime culture can be made a success in Southern California. The tree does well when trimmed in the shape of a hedge.

The olive started in with quite a boom in California about 10 years ago, when a number of orchards were set out, and much interest was manifested in the culture of the tree. It was then supposed that exports of olives and olive oil from California would soon assume large proportions. This, however, has not been the case. The olive has not kept pace with the orange, the raisin grape, the prune, and the fig. The leading growers are still Eliwood Cooper of Santa Barbara and Kimball Brothers of National City. Why more progress has not been made in the industry cannot be easily explained, except by the suggestion that those who have essayed olive culture lack experience.

It derives its chief income from olive oil, enormous quantities of which

are exported, after having been adulterated with American cotton-seed oil, sent to Italy for that purpose. That country produces over 70,000,000 gallons annually.

The olive will grow upon the rich plains, but in such locations it attains an abnormal wood growth at the expense of the richness of its fruits. The quality of the oil will likewise be affected. Its fruit corresponds to the soil where it is planted. In rich and moist lands it gives a heavy and fatty oil in warm and dry soil the oil will be finer. It is therefore a tree admirably adapted to the hill lands of this country, many of which have until recently been considered worthless. Such lands as this can be purchased at prices much below those asked for lands suitable for the culture of other fruit trees or vines. Damp, foggy districts do not suit the olive. It may grow large fruit, but the oil will be poor. The tree is grown in Italy up to 1500 feet, and in Sicily up to 2000 feet of altitude. Of temperature needed to develop the oil it is claimed that 63° Fahr. is needed for sprouting, 66° for blooming and 70° for ripening, or until the bitter taste is taken out of them. They are next put in pure water and allowed to remain until all traces of the lye have disappeared. Next they are placed in a weak brine, followed by a stronger one, in which they are subsequently bottled. The olives are generally bottled in pint bottles or jars, which cost, already labeled, but 5 cents. They sell for \$3 a dozen, or 84 a case.

It is difficult to overestimate the importance which the olive industry of California may assume during the coming decade. It alone is sufficient to make of Southern California a populous and wealthy State.

Probably no fruit has risen so rapidly in the estimation of Southern California horticulturists during the past 12 months as the fig. High prices realized for recent shipments to the East have convinced growers that there is big money in raising figs. The United States imports at present nearly 5000 tons of figs, all of which might be grown in Southern California. For many years the fig has been raised in California, but until recently the only variety known, has been the blue fig. This, though excellent for home use, is not a good dryer. Since the introduction of the California fig, which has been introduced, including the White Adriatic and Brown Smyrna. These, when properly dried, are equal to the imported article. Eastern fruit commission men have recently called attention to the fact that the California fig industry will soon assume as great importance as that of the raisin-grape and prune.

During the past year several hundred acres have been planted in figs, and the industry to the improved varieties of the fig. Almost all of our soils and locations are suited to it, from the valley to the foothills. The warm, dry, alluvial soil and climate of the interior valleys and foothills seem best adapted to its growth and curing.

They are well drained. It seems to do best in the foothills, at an elevation of from 500 to 1500 feet above the sea. The trees should be planted from 25 to 32 feet apart, and the spaces between filled with grass and mowed. The trees should be taken out when the figs require all the space.

The yield of fig trees is enormous, and they begin to bear at an early age. Trees that yield from 600 to 1000 pounds are not uncommon, which at 6 cents a pound for dried fruit, is a pretty good bonanza for the grower. There is practically no limit to the amount of figs that can be disposed of at good prices, when prepared by canning, or dried in a manner to compare with the imported.

The prune has not been so largely planted in Southern California as in the northern and central portions of the State. There it has been found very profitable, and of late a number of young orchards have been planted in this county, notably in the Santa Ana Valley. It is calculated that the prune can be raised in this State and dried ready for the market at 5 cents a pound and give a net profit of \$100 an acre. There is no immediate danger of the price falling to this figure, should it do so, the consumption would be quadrupled.

The California crop now amounts to about 3,500,000 pounds annually and is growing rapidly. A large portion of Los Angeles county is suited to prune culture.

The English walnut is coming rapidly to the front as a profitable product of Los Angeles county. Several soft shell varieties have recently been introduced, which bear much earlier than the old sorts. In the interviews with horticulturists published in another column, we have found an account of some remarkably profitable results received from walnut culture, some running as high as \$300 per acre.

The walnut prefers a moist rich soil. The tree is rather slow in coming into bearing, the old varieties requiring about ten years, and the soft shell six years, but once in bearing it keeps on increasing its crop for 50 years or more. No crop is more easily gathered than the walnut, and it is ready to be gathered after all crops are in.

A very large area has been planted to walnuts in the Santa Ana Valley during the past year.

The almond has not received the attention which it deserves in Los Angeles county during the past few years. It is a rather delicate tree to raise, but in a measure, account for this neglect. In order to have the trees bear well, different varieties should be planted close together, in order that they may fertilize each other when in bloom. There are many portions of Los Angeles county, especially in the foothills, which are well adapted to the culture of the almond. The tree thrives on lands not rich enough to produce good crops of peaches or apricots. It is an early bearer, yielding a good crop in four years from planting.

It must not be supposed that because Southern California is the home of the orange, the lemon, the fig and other semi-tropical fruits, that those fruits which are raised in more northern climes will not succeed here. Such is far from being the case. Large orchards are being planted annually to all varieties of deciduous fruits, with the exception of the cherry, which only succeeds in some of the more elevated regions. The apple is as profitable in Southern California as the orange.

The soil should be kept loose, and plowed and cultivated once or twice during the season.

The variety which has been chiefly cultivated in California is that which was planted by the mission fathers, and is known as the Mission olive. The Pico line has also been planted of late. As its name implies, it is a small variety. Little experience has been had with the larger varieties, which are seen in our stores, such as the Spanish Queen olive. Although inferior in point of size, the Mission is a fine variety, and its substance is proportionately greater than that of any of the larger olives. It is a freestone, while the Queen is a clingstone.

It is intended for picking, the olives are gathered just before their yellowish-green color deepens into the purple of their full maturity. When used for oil, they are allowed to become perfectly ripe. The process of picking is simple and attended with little labor and no difficulty. They are first put into a solution of two ounces of concentrated lye to one gallon of water, and allowed to remain therein for 66 hours, or until the bitter taste is taken out of them. They are next put in pure water and allowed to remain until all traces of the lye have disappeared. Next they are placed in a weak brine, followed by a stronger one, in which they are subsequently bottled. The olives are generally bottled in pint bottles or jars, which cost, already labeled, but 5 cents. They sell for \$3 a dozen, or 84 a case.

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The almond has not received the attention which it deserves in Los Angeles county during the past few years. It is a rather delicate tree to raise, but in a measure, account for this neglect. In order to have the trees bear well, different varieties should be planted close together, in order that they may fertilize each other when in bloom. There are many portions of Los Angeles county, especially in the foothills, which are well adapted to the culture of the almond. The tree thrives on lands not rich enough to produce good crops of peaches or apricots. It is an early bearer, yielding a good crop in four years from planting.

It must not be supposed that because Southern California is the home of the orange, the lemon, the fig and other semi-tropical fruits, that those fruits which are raised in more northern climes will not succeed here. Such is far from being the case. Large orchards are being planted annually to all varieties of deciduous fruits, with the exception of the cherry, which only succeeds in some of the more elevated regions. The apple is as profitable in Southern California as the orange.

cially adapted to California, and are very profitable, because they can be successfully grown in other places. is the apricot. Canned apricots will always be in demand. The dried apricot is perhaps the best dried fruit we have. Our evaporated apricots command the best prices in the markets of the world. California is one of the few places in the world that can raise this luscious fruit. Apricots have been raised very successfully in Los Angeles county. The tree needs a light friable soil, and does best within range of the sea breeze. At four years from planting it will yield from 50 to 75 pounds; at 5 years, 100 to 150 pounds; at six years, from 200 to 300 pounds.

At our pomological fairs may be seen apples of immense size and quality raised in this county. Apples always fetch a high price in this State. The product of an apple orchard in full bearing will compare not unfavorably with that of an orange grove.

Pear trees grow to a very large size in this section and bear a fine quality of fruit. They are very profitable. In 1881 150 trees were sold to a Los Angeles orchardist. From these he sold in 1881, \$35 worth; in 1882, \$40; in 1883, \$240; in 1884, \$300; and in 1885, \$445. This is only a fair yield. Some of the trees yielded \$7 and \$8 worth each the following year.

Peaches flourish in the warm sandy soil which is so plentiful in this county. Evaporated peeled peaches command fancy prices. For canned peaches there is a good market in the East and Europe.

SOME OF THE FINEST vineyards in the world are found in the vicinity of Los Angeles. The San Gabriel Winery, south of Pasadena, is one of the largest in the world, the holding capacity of the cellar being 15,000,000 gallons. Grapes are grown for table use, for wine and for raisins. About four years ago, a disease known as the mildew appeared among the vines in the Santa Ana Valley, and has since spread considerably to other parts of the county, greatly retarding the development of the industry, and temporarily wiping out in some sections. Some of the raisin-growers of the Santa Ana Valley will, however, start up planting again this year on a moderate scale. Such mysterious diseases have come and gone before. Before this disease made its appearance, the raisin industry in the Santa Ana Valley was of great importance.

A practical Southern California raisin-grape-grower furnishes the following as the result of his experience. Assuming that you have land, the expenses of the first year will be as follows, per acre:

Roots, 600, 1-year-old, at 2 cents.....	12.00
Planting and care of same.....	30.00
Water for same.....	3.50
Staking and incidentals.....	10.00
Total.....	\$57.50
Labor and water second year.....	35.00
Total.....	\$92.50

After the end of two years the returns would be:

First year, 250 boxes.....	\$40.00
Sixth year, 250 boxes.....	\$40.00
Total.....	\$80.00
Net profit per acre, six years.....	\$87.50

The farmer now has a paying vineyard, and raisins bring him \$1.50 a box up, according to quality.

There are very large profits to be made in this county on small fruits. Strawberries, blackberries and raspberries may be gathered during nine months of the year, in favorable locations, and yield heavy returns, particularly when the grower has a family to assist in gathering the crop, which constitutes the chief expense. The berries have netted over \$300 an acre and strawberries \$500.

A prominent producer of Los Angeles gives the following statement regarding profits on forest trees in this county: Supposing 60 acres to be planted, this would make 26,100 plants. The expenses would be as follows:

26,100 eucalyptus trees at \$10 per thousand.....	\$261.00
Planting.....	173.00
Plowing.....	150.00
Harrowing and pulverizing.....	40.00
Cultivating, six months.....	50.00
Total.....	\$674.00

The second year will require a man eight months, at \$60 a month, including team and board, which would amount to \$480. After that there would not be any expense to amount to anything. Total amount the first year, in round numbers, \$1000; the second year, \$500. These are outside figures. If the trees are well taken care of when a year old they ought to average 12 to 15 feet in height, and the second year 30 feet, and when five years old will pay a handsome profit. There being 455 trees to the acre, eight trees, when 5 years old, will make a cord of stave-wood, worth \$8 per cord, which will cost half this sum to have it prepared for and delivered to the consumers, leaving a net profit of \$245 to the acre, or \$15,300 net per acre per annum for each year of the five, and in five years after there will be as much or more wood as at the first cutting. It is quite probable that the timber will be used for various purposes in the near future, that there will be still more profitable. It will be readily seen that after the first planting there will not be any expense, as all that is ever required after the timber is removed is to take off some of the sprouts. There is no reason why one planting will not last for fifty or one hundred years, and pay interest on a value of \$500 per acre. The best time to plant in this country is in February or March. The trees referred to are the eucalyptus, known as the red and blue gum.

Following this will be found pages of the Annual Trade Number as follows: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, which are reproduced in the daily for the sake of the statistical and other facts which they contain. They afford a glimpse of the contents of the full publication, which embraces 48 pages.

Annual Pages.

Following this will be found pages of the Annual Trade Number as follows: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, which are reproduced in the daily for the sake of the statistical and other facts which they contain. They afford a glimpse of the contents of the full publication, which embraces 48 pages.

SOLID STATISTICS

Of the Wealth and Progress
of Los Angeles.How the Several Counties of the State
Are Assessed.Reports from County Officers—Con-
vincing Totals.How the Affairs of the City Have
—Been Administered—State-
ments from Federal
Officers, Etc., Etc.

COMPILATIONS of figures showing the material growth and present status of Los Angeles county and city will be found in the following columns. They tell their own story with an exactness and force which can only be drawn from figures systematically and accurately arranged:

THE STATE.

Values of Property and Rates of
Taxation for the Year 1889.
As shown by the books of the State
Controller:

Counties.	Total Value of Taxable Property.
Alameda.....	\$ 71,896,182
Alpine.....	282,835
Amador.....	4,281,969
Butte.....	20,730,252
Calaveras.....	4,315,461
Colusa.....	24,365,995
Contra Costa.....	15,194,592
Del Norte.....	1,925,061
El Dorado.....	3,879,887
Fresno.....	1,892,844
Humboldt.....	18,440,872
Inyo.....	1,548,695
Kern.....	11,831,780
Lake.....	4,022,484
Lassen.....	2,527,449
Los Angeles.....	84,376,319
Marin.....	11,108,657
Mariposa.....	1,849,641
Merced.....	11,944,385
Monterey.....	14,140,845
Mono.....	2,068,084
Napa.....	941,010
Nevada.....	15,536,087
Placer.....	14,970,181
Piute.....	6,305,090
Pumas.....	10,118,060
Sacramento.....	2,309,441
San Benito.....	34,490,174
San Bernardino.....	6,332,911
San Diego.....	23,267,955
San Francisco.....	31,560,918
San Joaquin.....	291,700,433
San Luis Obispo.....	38,802,606
San Mateo.....	15,139,117
Santa Barbara.....	13,888,887
Santa Clara.....	15,888,628
Santa Cruz.....	53,112,662
Shasta.....	11,160,230
Sierra.....	6,594,003
Siskiyou.....	1,679,388
Solano.....	6,966,007
Sonoma.....	20,182,050
Stanislaus.....	31,232,071
Sutter.....	16,581,737
Tehama.....	10,070,898
Trinity.....	11,901,255
Tulare.....	1,153,344
Tuolumne.....	24,343,013
Ventura.....	2,716,465
Yolo.....	8,568,932
Yuba.....	20,911,325
Orange.....	7,046,316
Total.....	\$1,111,590,979

WEALTH OF THE COUNTY

AS SHOWN BY THE OFFICERS
BOOKS.Digests of the Reports of County As-
sessor, Auditor, Recorder, Coun-
ty Clerk, Superintendent of
Schools and Treasurer.

THE assessments for State and county taxation show the following results, the statement including also the values of Orange county, which was segregated after March 1, 1889:

Country real estate.....	\$ 26,290,329
Improvements.....	3,336,757
City and town lots.....	44,119,096
Improvements.....	16,179,783
Telegraph and telephone.....	54,235
Irrigating ditches.....	15,000
Total real estate and im- provements.....	\$ 90,289,190
Personal property.....	9,141,753
Money.....	146,750
Solvent credits.....	441,825
Total value of all property.....	\$100,019,518
TELEGRAPH AND RAILROAD LINES, ETC.	
Western Union Telegraph Com- pany's line, 161 miles.....	\$ 27,860
Sunset Telegraph and Tele- phone, 233 miles.....	11,500
Azusa Water Development Com- pany.....	15,000

L. A. & P. R. R. Co.—	
25 1/2 miles.....	49,250
Railroad franchise.....	1,000
Personal property.....	11,725
Southern Pacific R. R. Co.—	
Personal property.....	73,200
Land.....	159,110
Improvements.....	105,200
Telegraph line.....	9,769
Total.....	\$ 346,270
California Central R. R. Co.—	
Personal property.....	3,000
Land.....	173,325
Improvements.....	111,370
Telegraph line.....	5,115
Total.....	\$ 291,710

State, county and municipal bonds.....	25
Beeshives, 13,871.....	15,065
Brands, 108,637.....	30,401
Butter, 700.....	175
Calves, 4131.....	37,440
Casks and tanks.....	40,335
Cattle (beef), 721.....	12,355
Cattle (stock), 17,100.....	197,565
Coal, tons, 8400.....	30,900
Colts, 4699.....	113,340
Consigned goods.....	8,190
Cows, graded, 11,230.....	298,440
Farm utensils.....	53,980
Firearms.....	14,750
Fixtures, saloons, stores.....	927,700
Franchises.....	61,329
Furniture.....	1,482,695
Goats (common), 540.....	685
Goods, wares and merchandise.....	2,186,240
Wheat, tons, 1704.....	34,040
Barley, tons, 2603.....	16,985
Corn, tons, 1217.....	8,080
Harness, robes and saddles, 12.....	98,940
Hay, tons, 9370.....	37,153
Hogs, 5750.....	19,330
Honey, pounds, 33,300.....	870
Horses, thoroughbred, 263.....	85,875
Horses, American, 23,840.....	997,985
Jacks and Jennies, 74.....	1,540
Jewelry.....	38,290
Libraries, law, etc.....	63,857
Lumber, feet, 9,448,000.....	220,555
Machinery.....	392,445
Mules, 1781.....	86,935
Oxen, 3.....	45
Pianos, 2011.....	204,785
Poultry, dozens, 14,708.....	36,180
Sewing machines.....	72,805
Sheep, graded, 152,282.....	213,195
Lambs, 8743.....	4,910
Steam vessels and watercraft, 63.....	62,590
Wagons, 12,705.....	480,420
Watches, 5901.....	95,815
Wines, gallons, 483,920.....	71,400
Wood, cords, 1559.....	6,375
Other property.....	230,623
Total.....	\$9,141,753
Value of property affected by mortgages.....	\$13,058,846
Trust deeds and mortgages.....	9,353,211

ACHAAGE IN GRAIN.	
No acres sown, 1889—	
Wheat.....	50,760
Barley.....	35,290
Corn.....	17,400
Hay.....	17,040
Total acreage in grain.....	120,490
Total acreage assessed.....	1,652,922

THE NET ASSESSMENT.
From the above assessment the State Board of Equalization made a reduction of 10 per cent. After making this deduction and equalization by the Board of Supervisors, the County Auditor reports totals as follows:

Value of real estate other than city and town lots.....	\$24,569,935
Value of city and town lots.....	30,703,318
Total value of real estate.....	\$64,373,253
Value of improvements on lands other than city and town lots.....	3,230,444
Value of improvements on city and town lots.....	14,112,500
Total value of improve- ments.....	17,348,944
Total real estate and im- provements.....	\$81,622,197
Value of personal property, including money.....	9,038,378
Value of railroads assessed by State Board of Equal- ization.....	2,981,511
Total value of all prop- erty.....	\$93,647,086
Set off to Orange county.....	9,270,767
Net assessment Los An- geles county.....	\$84,376,319

THE TAX LEVY for 1889-'90 is as follows:	
Within city limits—	Cents on \$100.
State fund.....	\$.722
Current expense.....	.25
School fund.....	.16
Hospital.....	.10625
Courthouse and jail fund.....	.10
Salary fund.....	.1125
Interest and sinking fund, 1881.....	.0013
Interest and sinking fund, 1882.....	.0036
Interest and sinking fund, 1884.....	.00685
Interest and sinking fund, 1885.....	.0255
Interest and sinking fund, 1887.....	.012
Total in city.....	\$1.50
Add for county-road tax.....	.30
Total in country.....	\$1.80

SPECIAL SCHOOL TAXES.	
Districts.	Rate.
Alhambra.....	\$0.42
Aliso.....	.20
Anaheim.....	.06
Artesia.....	.25
Azusa.....	.25
Azusa City.....	.25
Belvidere.....	.20
Bloomfield.....	.20
Centralia.....	.10
Clearwater.....	.50
Compton.....	.20
Crescenta.....	2.00
Calabasas.....	.40
Delhi.....	.07
Downey.....	.45

Duarte.....	60
El Modena.....	1.20
Enterprise.....	.40
Evergreen.....	.70
Fullerton.....	.60
Glendora.....	.15
Harmony.....	.30
Highland Park.....	1.55
Hyde Park.....	.25
Hudson.....	.10
Ivanhoe.....	.20
Inglewood.....	.50
Lamanda Park.....	.30
Lancaster.....	.15
Lankershim.....	.35
Laurel.....	.80
Los Feliz.....	.45
Long Beach.....	.38
Los Virgines.....	.65
La Liebre.....	.20
Monrovia.....	.25
Morning Side.....	.90
New Hope.....	1.50
Newhall.....	.40
Ocean View.....	.30
Old River.....	.40
Pacoima.....	.50
Palmdale.....	.05
Palomares.....	.25
Pasadena.....	.35
Pico.....	.85
Placentia.....	.04
Providence.....	.60
Rancho.....	.06
Redondo.....	.10
Rosedale.....	1.00
San Gabriel.....	.25
San Pascual.....	.08
San Pedro.....	.25
Santa Ana.....	.25
Santa Monica.....	.15
Sepulveda.....	.20
Sulphur Springs.....	.55
Soledad.....	.12
Tejunga.....	.50
Tajauta.....	.06
The Palms.....	.30
University.....	.25
Vineland.....	.49
Vineland.....	.40
West Vernon.....	.60
Wilmington.....	.20

COMPARISONS.
An analysis of the tax levy shows that it has been slightly increased over the levy of 1888. That year's levy was \$1.20 in the county and \$1 in the city, thus making an increase of 60 cents in the county and 50 cents in the city. But this does not state the case accurately, because the State levy is increased for 1889. It will be remembered that the recent State levy is 72.2 cents, while the year before it was but 50.4 cents, an increase this year of 21.8 cents. So that in reality the county levy is increased only 38 and 28 cents respectively in the county and city for the current year. In 1888 the levy was made upon an assessment of \$103,000,000, while by the action of the Board of Equalization in reducing the assessment 10 per cent, the present levy is made upon an assessment of \$93,647,086, quite a reduction.

BONDED INDEBTEDNESS.
The total amount of bonds outstanding is \$751,500, and cash in the county treasury applicable to the payment of the indebtedness, \$25,049.37. There is no floating debt.
The bonded indebtedness of the county is arranged as follows:

FUNDED DEBT.	Am't bonds	Year of maturity	Rate of interest
Bonds of 1881.....	\$ 48,000	1901	6%
Bonds of 1882.....	45,000	1902	6%
Bonds of 1884.....	84,000	1904	4 1/2%
Bonds of 1885.....	437,100	1905	4 1/2%
Bonds of 1887.....	100,000	1907	4 1/2%
Bonds of 1888.....	100,000	1907	4 1/2%
Totals.....	\$812,000		

+ Courthouse.	
* Interest payable semi-annually.	
COUNTY PROPERTY.	
Old Courthouse, estimated value ..	\$125,000
New Courthouse (now building).....	400,000
County Jail.....	50,000
County Hospital.....	50,000
County Farm.....	25,000
Real estate.....	25,000
Total.....	\$995,000

AUDITOR'S REPORT.

Showing the Financial Condition of the County.
Amount of bonds outstanding, \$751,500; no floating debt; interest paid at maturity; cash on hand to pay bonds, \$25,000; most of the bonds bear 4 1/2 per cent. interest per annum and command a premium of 7 to 10 per cent.
Value of real estate and county buildings, not including bridges, \$695,000.

State and county taxes charged to Tax Collector (to be collected), \$1,452,390.61; for State purposes, \$654,605.45; for county purposes, \$797,785.16.
Levied for redeeming school bonds and paying interest, \$81,678.42.
Of county taxes \$87,000 is for road purposes.
Rate of assessment inside cities, \$1.50; outside cities, \$1.80 on the \$100; State rate, .722 on the \$100; county rate (within cities), .778 on the \$100; county rate (country), 1.078 on the \$100.

Total number of acres of land assessed, 1,652,922.

SUMMARY.
Total value of all property not including railroad property..... \$101,656,486
Railroads in Los Angeles county, apportioned by State Board of Equalization..... 2,981,511

Set off for Orange county, approximately..... 9,270,767

Net assessment of the county..... \$ 94,387,230
Reduced by the State Board of Equalization to..... 84,376,319

Mortgages assessed in Los Angeles county..... \$10,031,491

SCHOOL BONDS OUTSTANDING.

Districts—	
El Monte.....	\$ 1,000
Little Lake.....	500
The Pass.....	720
Sepulveda.....	2,730
Pasadena.....	12,500
Tajauta.....	500
Downey.....	4,000
Placentia.....	1,000
New Hope.....	400
Wilmington.....	1,000
San Pedro.....	7,800
Palomares.....	10,000
San Pascual.....	85,000
Highland Park.....	16,500
Long Beach.....	6,000
Evergreen.....	21,000
Compton.....	1,000
Pico.....	2,500
La Cañada.....	2,400
Ocean View.....	1,000
San Dimas.....	1,500
Alhambra.....	6,500
Sulphur Springs.....	2,000
Azusa.....	4,000
Tejunga.....	4,900
Harmony.....	100
Allan.....	1,200
Enterprise.....	500
Eagle Rock.....	1,500
Vineland.....	1,000
Bloomfield.....	2,500
Crescenta.....	4,000
Santa Monica.....	20,000
Rosedale.....	4,000
Centralia.....	6,000
Providence.....	10,000
The Palms.....	7,000
El Modena.....	15,000
Morningside.....	750
Rancho.....	10,000
Inglewood.....	4,000
Glendora.....	4,000
Hyde Park.....	10,000
Pacoima.....	6,000
Belvidere.....	2,500
Tejunga.....	3,000
Artesia.....	4,000
Clearwater.....	1,000
University.....	1,000
Fullerton.....	8,000
Vineland.....	4,000
Monrovia.....	10,000
Lamanda Park.....	8,000
San Gabriel.....	10,000
Azusa City.....	9,000
Ivanhoe.....	4,700
West Vernon.....	12,000
Redondo Beach.....	5,000
Los Feliz.....	4,700
Lankershim.....	5,000
Lancaster.....	4,000
Old River.....	2,000
Soledad.....	2,500
La Liebre.....	1,500
Calabasas.....	2,500
Los Virgines.....	1,500
Hudson.....	2,000

Most of these bonds bear 8 per cent. interest and are worth from 10 to 15 per cent. premium in the market.

COUNTY SCHOOLS.

Statement Compiled by the County Superintendent.

Following are miscellaneous statistics from the County Superintendent's office, for the school year ending June 30, 1889:

Number grammar schools in county.....	111
Number primary schools in county.....	308
Number high schools in county.....	1
Number grammar-school course.....	3
Number new districts organized.....	14
Number districts in county.....	152
Number new buildings erected.....	25
Number male teachers.....	333
Number of female teachers.....	439
Total number of teachers.....	772
Number who are graduates of California State Normal schools.....	144
Number who are graduates of other State Normal schools.....	78
Number who hold California life diplomas.....	64
Number who hold California educational diplomas.....	41
Number districts maintaining school eight months or longer.....	110
Average number months school was maintained in county.....	8.59
Average daily attendance in county.....	14,779
Total number enrolled.....	23,327

SALARIES.
Average salary male teachers, city..... \$103
Average salary male teachers, country..... 83
Average salary female teachers, city..... 90
Average salary female teachers, country..... 75
By the organization of Orange county, 28 full districts and portions of six others were taken from Los Angeles county. The school population of this territory, not including the joint districts, is 3775.

FINANCIAL STATISTICS.

Amount of revenue derived from all sources (not including city school tax) for year ending June 30, 1889:
Amount received from State apportionment..... \$240,378 00
Amount received from county apportionment..... 119,969 00
Amount received from district taxes..... 20,337 00
Total..... \$380,684 00

EXPENDITURES.

For teachers' salaries..... \$324,688 22
For contingent expenses..... 50,681 00

For Library, books and apparatus..... 5,149 40

Total..... \$380,419 20

During the school year ending June 30, 1889, books to the amount of \$219,540.68 were sold for purpose of erecting and furnishing school buildings outside of the city of Los Angeles. Since July 1, 1889, five districts have voted bonds, aggregating \$14,206, with which new buildings are now being erected.

THE COURTS.

How the Legal Business of Los Angeles is Done.

The legal business of Los Angeles county has assumed large proportions during the last few years. It became a necessity during past spring to increase the number of Superior Court judges from four to six; and the new city charter provided for the addition of a city justice and two police judges to the courts of the city. Since the organization of Orange county from a part of Los Angeles county all suits pertaining to Orange county have been transferred to it, but the volume of business shows but little diminution. In the Superior Courts the dockets are crowded, and the six judges have their hands full in holding their own and keeping along with the business.

By a carefully-arranged system all the civil business in the Superior Courts is handled by four of the departments, while the criminal cases all go to the other two. Were it not for the thorough system followed the six departments would not be sufficient to keep the docket from crowding up with unfinished business.

The different departments dispose of from 400 to 600 cases a year. Until recently there has been no general plan for keeping statistics of the number of cases tried, but each clerk of court now has a register of actions which he keeps, and it will be an easy matter hereafter to obtain definite figures in regard to the business of the Superior Courts.

The United States Circuit and District Courts during the past year have disposed of about 50 cases each, while about 75 cases have been filed in each court.

The justice courts transact a large volume of business. Justices Savage and Lockwood have each tried 600 or 700 cases during the past year, while Justice Austin has not had so many. The police judges in the number of cases tried are, of course, far ahead of all the other courts.

The following is a list of the different courts in the city, with the names of the judges and court officials:

United States Courts—Hon. Stephen J. Field, Associate Justice of the Supreme Court of the United States; Hon. Lorenzo Sawyer, Circuit Judge; Hon. Erskine M. Ross, District Judge; A. W. Hutton, Esq., United States Attorney; William M. Van Dyke, Esq., Clerk; E. H. Owens, Esq., Clerk District Court; D. R. Risley, Marshal; Charles L. Batchelor, Esq., Standing Master and Examiner in Chancery. United States Commissioners, William M. Van Dyke, Los Angeles; L. C. McKeely, San Buenaventura; Charles Fernald, Santa Barbara; E. H. Owen, Los Angeles; John Mansfield, Los Angeles; M. L. Ward, San Diego.

Superior Courts—Department No. 1, W. A. Cheney, Judge; W. H. Crane, Clerk; C. J. Fox, Reporter; J. C. Clune, Deputy Sheriff.

Department No. 2, W. H. Clark, Judge; M. J. Ashmore, Clerk; Henry Henderson, Reporter; H. B. Abila, Deputy Sheriff.

Department No. 3, W. P. Wade, Judge; C. G. Keyes, Clerk; C. F. Rutan, Reporter; H. S. Chapplear, Deputy Sheriff.

Department No. 4, Walter Van Dyke, Judge; F. E. Lowry, Clerk; F. H. McAllister, Reporter; J. C. Wray, Deputy Sheriff.

Department No. 5, J. W. McKinley, Judge; H. S. Knapp, Clerk; F. H. Longley, Reporter; H. C. McClure, Deputy Sheriff.

Department No. 6, Lucien Shaw, Judge; W. L. Warren, Clerk; Leo Longley, Reporter; Peter Reel, Deputy Sheriff.

Justice Courts—Township Court, Theodore Savage, Justice; J. H. Mellette, Clerk; H. S. Clement, Constable.

City Justice Court, W. C. Lockwood, Justice; N. B. Walker, Clerk; Fred C. Smith, Constable.

City Justice Court, J. M. Austin, Justice; Joe Chambers, Clerk.

Police Courts—Owens, Judge; Stanton, Judge; Luckenbach, Clerk.

The Supreme Court of California meets in Los Angeles the first Monday in April and the second Monday in October of each year. The following counties comprise the district of Los Angeles: Santa Barbara, Ventura, Kern, Inyo, San Diego, San Bernardino, Los Angeles, Tulare, Fresno and San Luis Obispo.

Chief Justice, Hon. W. H. Beatty. Associate Justices: Hons. J. D. Thornton, Charles N. Fox, Van R.

Paterson, J. R. Sharpstein, T. B. McFarland, J. D. Works.

Officers of the Court: George A. Johnson, Attorney-General; W. P. Johnson, Deputy Attorney-General; C. C. Pomeroy, Reporter; J. D. Spencer, Clerk; B. C. Weir, Deputy Clerk, Los Angeles; Frank T. Meagher, Secretary; Henry C. Finkler, Secretary; E. A. Girvin, Phonographic Reporter; Ezra Washburn, Bailiff; W. I. Russell, Bailiff.

Commissioners: I. S. Belcher, H. S. Foote, Robert Y. Hayne, P. Van Clief, James A. Gibson, D. B. Woolf, Secretary to Commissioners.

SHERIFF'S OFFICE.

Fees Collected, Criminal and Civil Business Transacted.

The following report showing amount of work done by Sheriff's office of Los Angeles county during the year 1889 is furnished by Sheriff Aguirre:

	Gross Receipts.	Disbursements.	Paid County Treasurer.
January.....	\$2,576 10	\$1,198 50	\$1,376 94
February.....	2,313 37	721 15	1,592 22
March.....	3,081 55	982 30	2,099 25
April.....	3,649 54	1,649 85	2,000 69
May.....	2,476 58	833 19	1,642 95
June.....	2,437 88	912 10	1,525 78
July.....	2,439 44	1,407 00	1,032 43
August.....	2,570 81	881 96	1,688 85
September.....	2,111 85	790 80	1,320 28
October.....	2,920 88	1,084 6	1,905 76
November.....	2,562 00	839 70	1,721 51
December.....	2,700 00	830 00	1,920 00
Totals.....	\$31,732 26	\$12,055 32	\$19,696 88

Number of convicts sent to State Prison..... 80
Number of insane sent to asylum..... 62
Criminal subpoenas served during year..... 3,000
Civil subpoenas served during year..... 1,700
Grand jurors and witnesses..... 400
Number of grand and trial jurors summoned..... 600
Last case entered December 30, 1889, A.D. 12,027
First case entered January 7, 1889, No..... 0,476
Number of transcripts during year..... 114
Total number incarcerated during 1889..... 2,979
Male..... 2,008
Female..... 971
Total number discharged..... 1,902
Male..... 1,373
Female..... 529
Number now in jail..... 104

COUNTY CLERK.

Business of the Office for the Years 1888 and 1889.

	1888	1889
Marriage licenses.....	1,050	1,301
Criminal cases.....	283	385
Probate cases.....	343	302
Civil cases.....	2,035	2,359

RECEIPTS.

	1888	1889
January.....	\$2,551 70	\$3,844 05
February.....	2,700 15	3,007 15
March.....	3,611 03	3,812 58
April.....	2,588 65	3,670 35
May.....	2,988 35	4,236 50
June.....	3,831 70	3,574 20
July.....	2,928 90	3,532 30
August.....	2,882 35	3,415 75
September.....	3,125 55	3,702 85
October.....	3,258 85	3,606 00
November.....	3,157 30	3,954 30
December.....	3,288 38	3,675 00
Totals.....	\$36,313 23	\$44,011 12

Eight hundred and fifty veterans draw pensions through this office.

The fees of the office were reduced 20 per cent. by the last Legislature, taking effect in April, 1889.

All fees are paid into the county treasury.

The office nets the county about \$1500 monthly. Taking into consideration the reduction by the last Legislature the business of the office has increased about 85 per cent. during the year 1889.

*Estimated.

Recorder's Statement.

The following statement prepared by County Recorder John W. Francis, shows the number of folios received each month during the year, together with the fees collected therefor, and also a statement of those received from the same period in 1888:

MONTH.	Folio 1888	Folio 1889	Folio 1888	Folio 1889
January.....	\$6,615 65	\$241 80	\$4,349 95	\$188 32
February.....	6,761 20	263 41	5,079 55	224 24
March.....	7,647 95	310 57	5,609 20	237 56
April.....	6,749 25	286 78	5,938 90	238 55
May.....	6,759 85	211 49	3,393 70	251 43
June.....	6,435 65	238 14	3,713 30	182 07
July.....	5,578 65	232 62	3,584 85	187 21
August.....	5,635 80	289 16	2,975 06	153 62
September.....	5,192 20	336 09	3,274 96	152 12
October.....	5,114 51	212 18	2,371 80	163 18
November.....	4,619 85	184 37	3,248 25	174 62
December.....	5,451 35	211 36	4,736 60	195 00
Totals.....	\$72,545 25	\$2,936 71	\$40,820 10	\$2,267 74

* By an act of the Legislature at its twenty-eighth session, the fees for recording were reduced about 40 per cent. which took effect in April, and while the number of instruments filed for record this year, will compare favorably with those filed in 1888, the fees received show a decided falling off.

* Estimated.

County Treasurer.

Following is a summary of business transacted in the County Treasurer's office for one year, ending November 30, 1889:

Cash on hand, December 1, 1888..... \$309,577 74
Total amount received from all

sources..... 1,827,031 37

Total.....	\$2,226,609 11
Disbursements for school purposes.....	\$166,210 50
For building courthouse.....	142,770 42
Interest and sinking funds.....	78,635 20
Other county purposes.....	712,128 38
Paid State Treasurer.....	518,280 85
Total.....	\$2,068,025 35
Balance on hand December 1, 1889.....	\$158,583 76

*NOTE.—This item includes salaries libraries, special expenses, buildings, school bonds and coupons.

Comparisons.

A comparison of the assessments of the various counties of Southern California in 1880 and 1889 is interesting:

	Assessment 1880.	Assessment 1889.
Los Angeles.....	\$16,975,591	\$24,376,319
Kern.....	6,055,460	11,831,750
San Bernardino.....	2,528,373	23,267,055
San Diego.....	3,558,383	31,520,918
San Luis Obispo.....	4,376,084	15,130,117
Santa Barbara.....	5,317,638	15,888,628
Ventura.....	3,270,161	8,598,932

Southern California has 34 per cent. of the area of the State. The assessment in 1880 was 6 per cent. of that of the State—in 1888 it was 20 per cent.—a wonderful growth. Southern California in 1889 has 21 per cent. of the population of the State.

THE CITY.

REPORTS OF MUNICIPAL OFFICERS FOR THE YEAR.

Several Departments—Streets Improved—Sewers Laid—City Schools, Library, Police, Water.

IN spite of the reactionary times, the city of Los Angeles has been experiencing a regular boom in public improvements during the year just closed. It is safe to say that in no three years of its previous existence was so much accomplished in this line. The city has thus been "catching up," so to speak, in its public improvements, and overtaking the expansion of the previous phenomenal years of growth. The reports of municipal officers appended show in detail the work accomplished.

CITY ASSESSMENTS.

As Shown by the Books of the City Assessor.

Value of land.....	\$31,593,082 00
Value of improvements.....	8,859,190 00
Value of personal property.....	3,993,464 00
Money.....	211,387 00
Franchises.....	131,695 00
Improvements assessed to non-owners of realty.....	80,855 00
Deductions for mortgages.....	4,630,010 00
Mortgages assessed.....	4,871,073 00
Total value of all property.....	46,977,101 00
Total value after equalization.....	516,968 00
Rate of assessment.....	1 10

CITY ENGINEER.

Report on Streets, Sewers and Other Improvements.

In pursuance of division 11, section 58, of article 4 of the new charter, I beg leave to present the following as my report:

The charter provides that I shall give a statement of the condition, character and cost of all public work and improvements in course of construction during the year. As it has not been the custom heretofore to make annual reports of work coming under the direction of the Surveyor, I deem it advisable to report on all public works done in the city up to date. This I have done in detail.

I also separate from the report the public work done or under construction during the period that the new charter has been in effect.

GRAVELED STREETS.

There are to date 399,906 lineal feet, or a trifle over 75 miles, of graded and graveled streets within the corporate limits of the city of Los Angeles, and the total sum expended on the same by the city and by private parties is \$1,126,710.

This does not include work accepted since the closing date of this report, the work being reported under the head of "work under contract."

PAVED STREETS.

The first street pavement laid in the city was laid by the city in front of what was formerly the City Hall lot, now the Bryson-Bonebrake block. This pavement has a concrete base with a surface of bituminous lime rock. It was laid during the latter part of 1885.

We have at present 13,500 lineal feet of bituminous lime-rock pavement, concrete base; 11,466 feet loose rock base; 8113 lineal feet of granite block; 1270 lineal feet of asphalt, concrete base; 2121 lineal feet of asphalt, broken rock base, and 3271 lineal feet of porphyry. The total length of paved street is 74 miles; cost, \$375,787.

BRIDGES.

The number of bridges owned by the city and open for traffic is eleven, eight

of which span the Los Angeles River, one the Arroyo Seco and two the Arroyo de los Posas.

The total length of all the bridges, approaches included, is 4175 feet. The total sum expended on them is \$192,261. This amount includes the cost of material and erection, together with the cost of removing and erecting the Ninth-street (formerly First-street) bridge, and the cost of enlarging and raising the Macy-street bridge across the Arroyo de los Posas.

The bridges in detail (the City Engineer's table is more exhaustive than the one here given) are as follows:

NAME.	Length, feet.	Width, feet.	Cost.
Buena Vista.....	300 20	20	\$22,000
Downey avenue.....	318 40	20	57,640
Kuhrts street.....	300 28	15	15,850
Aliso street.....	100 20	20	8,000
First street.....	300 40	20	67,400
Seventh street.....	300 20	20	3,000
Ninth street.....	300 20	20	18,000
Ninth street—moving.....	106 18	20	5,975
Daly street and Arroyo Seco.....	350 20	20	2,900
Macy street.....	284 20	20	1,075
Los Posas.....	70 39	20	745

LEVEES.

The city has built 2376 feet of levee north of Kuhrts street on the east line of the official bed of the Los Angeles River. It cost \$6.50 per lineal foot, or a total of \$15,432.

A fraction less than 2455 feet of levee has been built south of Aliso street, at a total cost of \$15,957. One-half this cost was paid by the city and one-half by private parties.

The above is all on the east side of the river, and was built during 1887. It has stood two winters, but there has been no severe flood since the work was completed.

The levee is in poor condition between Buena Vista street and Downey avenue and between Downey avenue and Kuhrts street, on the east side of the river. This is now being strengthened by the erection of wings, which will add very materially to the strength of the levee, and if placed close enough together there would be little danger of a washout.

SEWERS.

We have, to date, 110,000 lineal feet, or nearly twenty-one miles of sewers in the city.

Of that there are: Of cement—6174 feet 22-inch; 8317 16-inch; 5391 14-inch; 4977 12-inch; 12,233 10-inch; 10,326 8-inch; 2556 6-inch.

Of vitrified pipe—234 feet of 18-inch; 2331 15-inch; 7848 12-inch; 7904 10-inch; 15,384 8-inch; 9912 6-inch.

Wood—410 feet of 12x12 inches; 415 2x2 inches.

Constructed—999 feet of brick, egg-shaped, 16x24 inches; 3515 feet of 2x3 feet; 2215 feet of 18x24 inches; 650 feet of 3x5 feet, flat bottomed; 1590 feet of 2x3 feet, plank covered; and 6420 feet of 3x4 feet, plank covered.

The California Southern Railroad Company has built a levee on the west side of the official bed of the river from Downey avenue to a point near the south city line. The levee is in a dangerous condition at many points north of First street. The company also encroaches upon the bed of the river some 50 feet at a point between Downey avenue and Kuhrts street.

STORM DRAINS.

There are 21,941 lineal feet, or a trifle over four miles, of storm drains in the city.

Of that amount there are: Cement pipe—9170 feet of 30-inch; 4539 of 22-inch; 2109 of 18-inch; 890 of 16-inch; 680 of 12-inch.

Vitrified pipe—862 feet of 18-inch; 235 feet of 14-inch; 90 feet of 10-inch.

Brick conduit—120 feet of 3x5 feet.

Iron rectangular—75 feet of 12x24 inch.

Concrete and wood—1556 feet of 6x3 feet.

Wood-closed flumes—710 feet of 3x5 feet; 841 feet of 4x4 feet.

The total cost of the above, as nearly as could be obtained, is \$26,105, inclusive of the zanjas used as storm drains.

The following map shows the location of the Zanja Madre and other zanjas used as storm drains, and the storm drains (except one of 30-inch pipe, 500 or 600 feet long, at Westlake Park).

ZANJAS.

There are 15 zanjas, some of them each divided into several sections. The total length of all is 17 miles; cost \$136,977.

SIDEWALKS.

There are in the city 70 miles of cement and asphalt walks and 42 miles of granite and cement curbing, as follows:

Curb—cement, 33 miles; cost, \$59,722; granite, 9 miles; cost, \$44,262.

Walk—cement, 67 miles; cost, \$350,000; asphalt, 3 miles; cost, \$19,000.

As most of the work was done under

private contract, the cost is only closely approximated.

STREETS GRADED

and accepted since March 21, 1889:

By the city:	
Alabama, State to Second.....	\$3,100 11
Ann, Main to eastern terminus.....	1,243 12
Adams, Main to Figueroa.....	5,970 05
Brooklyn, Figueroa to Swift.....	790 52
Castelar, Walters to Alpine.....	1,607 19
Court, Beaudry avenue to Beaudry street.....	6,081 86
Collado, First to Western avenue.....	7,234 37
Daly, Hawkins to Schieffelin.....	426 92
Eighth, Main to Alameda.....	13,731 11
Eleventh, Los Angeles to San Pedro.....	3,801 00
Flower, Pico to Twelfth.....	1,203 77
Hope, Fourth to Fifth.....	2,961 83
Hoff, Water to Walnut.....	1,660 76
Hope, Pacheco to Washington.....	999 00
Lucas avenue, Fourth to Diamond.....	7,329 83
Laurel, Main to Grand.....	2,975 00
Macy, River to Bridge street.....	2,895 10
Maple avenue, Seventh to Eighth.....	1,121 71
Myrtle avenue, Seventh to Eighth.....	2,005 69
Ninth, Hope to Grand avenue.....	1,167 19
Ottawa, Pearl to Georgia Ball.....	2,943 27
Seminary, Lucas to Lafayette.....	2,316 52
Patton, Temple to Court.....	999 48
Sotello, San Fernando to Main.....	7,123 95
Seventh, Alameda to the river.....	5,300 40
Twelfth, Main to San Pedro.....	8,260 75
Walnut, Kahrts to Hoff.....	2,777 85
Waters, Temple to Court.....	2,630 00
Water, Downey avenue to Arroyo Seco.....	4,710 27
Park View avenue, Seventh to Ward.....	3,735 00
Ellis avenue, Figueroa to Toberman.....	3,084 00
York, Main to Figueroa.....	

Total (46,196 feet).....\$120,756 02
Or nearly nine miles, of which 3730 (less than one mile) were done by private contract, at a cost of \$7146. All the other work was done under the Vrooman Act.

STREET PAVING.

With bituminous limerock:	
Franklin, Fort to Spring, concrete base.....	\$ 2,791 52
Fort, Temple to Sixth.....	52,746 00
Fifth, Main to Hill.....	7,941 87
Fifth, Hill to Olive.....	1,857 44
Sonora, Main to New High.....	1,829 41
Third, Main to Hill.....	11,225 43
Fourth, Main to Hill.....	10,182 43
Second, Spring to Mott alley, north half, concrete base.....	1,000 00

Total (8658 feet).....\$ 88,898 59
Broken rock base, when not otherwise specified.

With porphyry:

Arcadia, Main to Los Angeles.....	\$ 1,280 35
Fort, Sixth to Seventh.....	4,834 36
Upper Main, Marchessault to College.....	12,335 29

Total (3370 feet).....\$ 17,449 00

Grand total (11,031 feet).....\$106,338 59
Total length of paving accepted by the city since March 21, 1889, 15,641 feet, costing \$106,338.59.

SIDEWALK AND CURB.

Laid since March 21, 1889:	
Granite curb, 2371 feet, probable cost.....	\$ 1,333 90
Cement curb, 27,556 feet, probable cost.....	9,697 60
Asphalt walk, 530 feet, probable cost.....	635 00
Cement walk, 9395 feet, probable cost.....	11,374 00

Total, 39,332 ft., probable cost, \$22,839 50

It has been impossible to get the exact cost of sidewalks, as they are nearly all laid by private contract.

The following work has been done since the new charter has been in force, since March 21, 1889:

ZANJAS.

No. 6-1, piped from Aliso street to First, 1866 feet, with 30-inch cement pipe, \$2917.92.

Zanja Madre, extended from First to Zanja No. 4, in Second street, 675.6 feet of brick conduit 4 feet in diameter, and 555 feet, 4.5 feet in diameter, at \$4.09 per lineal foot, \$5034.79. Total, \$7952.71.

STORM DRAINS.

At the junction of Main, Spring and Ninth streets, 235 feet of 14-inch vitrified pipe, 90 feet of 10-inch same, and 75 feet rectangular iron conduit, \$1154.

Downey avenue, east of the river, 862 feet of 18-inch vitrified pipe for storm drain; cost about \$800. Total, \$1954.

Besides, smaller drains, put in in various localities by the Street Superintendent.

SEWERS.

The following have been constructed and accepted:

Upper Main, Alpine to Alameda, 522 feet, 8-inch pipe.....	\$542 75
Orange, Kip to Farragut, 8-inch, 642 feet.....	609 00
Castelar, Bellevue to Alpine, 8-inch, 1335 feet.....	1,106 75
Rosas, Bellevue to the north, 8-inch, 807 feet.....	986 20
North Philadelphia, Bellevue to Alpine, 8-inch, 1130 feet.....	1,399 90
South Philadelphia, Bellevue avenue southerly, 8-inch, 633 feet.....	740 08
Walters, Buena Vista to Yale, 8-inch, 838 feet.....	919 43
Bernard, Buena Vista to Yale, 8-inch, 749 feet.....	663 06
Ann, Weyse to Main, 8-inch, 580 feet.....	520 00
Buena Vista, Savoy to Solano, 10-inch, 853 feet.....	1,124 51
Buena Vista, Bernard to Savoy, 12-inch, 1403 feet.....	1,838 75

Bellevue, Buena Vista to South Philadelphia, 10-inch, 1364 feet.....	1,754 19
New Main, Alameda to Elmira, 12-inch, 2393 feet.....	2,703 06
New Main, Elmira to Wilhards, 10-inch, 2301 feet.....	2,311 45

Total length, 15,565 feet, cost, \$16,730 60
To which add \$700, as noted below..... 700 00

All the above were constructed under the Vrooman Act. The cost includes materials, construction and incidental expenses, such as engineering, inspecting, etc.

The material used was vitrified, salt-glazed pipe. The manholes and flush tanks are constructed of brick and iron. The head of each of the laterals is provided with a 150-gallon flush tank. The cost of flush tanks and manholes is increased above.

In addition the city has built 242 feet of 10-inch vitrified sewer-pipe sewer on Sonora street, and 461 feet of 8-inch vitrified sewer on Aliso street, at a cost of about \$700.

BRIDGES.

The following have been completed and opened to the public: Across the river:

Downey avenue—Iron and steel, Pratt truss and deck bridge in three spans of 100 feet each; iron approaches, the north one 97 and the south one 345.50 feet in length; roadway 40 feet wide, and sidewalks 23 feet wide on each side. Cost, \$57,640.

First street—Similar to the above, except in length of approaches; eastern approach 91 feet; western 597.22 in length. Cost, \$67,400.

Over the Arroyo de Los Posas, Aliso street—King post truss bridge, 70 feet long; cost, \$743. Ten feet in width was afterward added by the Los Angeles Cable Company, and at its expense.

Macy street—Raised and enlarged; cost, \$1075.
Besides these the old covered bridge was turned over to the city by the county July 15, 1889, without cost. The same has since been raised at the east end to meet the grade of the newly-graded street; cost, \$275.

Total expenditures on bridge work since March 21, 1889, \$127,133.

Work under way:

GRADING AND GRAVELING.

Alvarado, Ward to west city line.....	5,923
Aliso, river to Pleasant avenue.....	1,780
Bellevue avenue, Beaudry to Laguna avenue.....	3,885
Bixel, Ward to Arnold.....	1,461
Edgewood road, Carroll avenue to Waters.....	1,060
Farragut, Seventh to Ward.....	1,300
Orange, Kip to Alvarado.....	3,326
Seventh, Park View to Alvarado.....	1,200
Ward, Alvarado to Park View.....	1,175
Arnold, Loma Drive to Columbia.....	284
Calumet avenue, East Edgewood road to Waters.....	573
Fourth, Main to Los Angeles.....	273
First, Mott to Evergreen.....	1,165
Flower, from Pine southerly.....	255
Grand avenue, Third to Fourth.....	703
Kellogg avenue.....	1,360
Los Angeles, Commercial to Alameda.....	1,360
Loma Drive, Ward to Arch.....	1,049
Lake Shore avenue, Second to Bellevue.....	3,150
Maple avenue, Seventh to Eighth.....	747
Myrtle avenue, Seventh to Eighth.....	585
Rodney avenue, Main to Maple.....	1,040
Third, Bixel to Beaudry.....	1,439
Water, Temple to Edgewood road.....	1,497
San Pedro, Fifth to Washington.....	4,791
Adams, Main to San Pedro.....	1,340
Second, Belmont to Figueroa.....	2,517
Louisiana avenue, Boyle avenue to Chicago street.....	1,608

Total48,527

PAVING.

New High street is being paved from Franklin to Temple with bituminous lime rock (concrete base), 583 feet.

SEWERS.

There are being laid 13,878 feet of sewers, under ordinance No. 165, in the College Hill district.

STORM DRAINS.

Twenty-two hundred feet of 30-inch cement pipe is being laid in Kahrts street for the purpose of carrying the storm water from the vicinity of Kahrts and Walnut streets to the river.

ZANJAS.

Zanja No. 3 is being piped with 30-inch cement pipe from Second street 990 feet southerly.

LEVYES.

Seven levee wings are being built along the east side of the Los Angeles River, between Kahrts street and Buena Vista street, at a cost of \$172 each. Since completed.

STREET SUPERINTENDENT.

Report in Detail of the Year's Improvements.

The City Superintendent of Streets reports as follows:

In accordance with section 58, article 13, of the city charter, I herewith present my annual report from the commencement of my term of office, viz., March 22, 1889, to date, being a report of the number of feet of graded and graveled streets constructed, with cost of same; number of feet of streets paved, together with cost of same; also the number of feet of sewers laid, and cost. I also include the total number of feet graded and graveled, also paved streets, and the

number of feet of sewers laid and in use in the city.

I will here state that upon taking possession of my office I found the same in a perfect chaotic state, and was compelled to organize as fast as I became familiar with the duties.

First—Number of feet of graded and graveled streets constructed this year, 55,060.78; cost of same, \$133,576.05.

Second—Number of feet of paved streets, 11,590; cost of same, \$104,637.70; making a total number of feet paved, graded and graveled, 66,770.50; cost of same, \$238,513.75.

Third—Number of feet of sewers laid, 17,763.50; cost of same, \$20,458.40.

Fourth—Total number of feet of graded and graveled streets now in the city, 256,367.78.

Fifth—Total number of paved streets now in use in the city, 25,925.61.

Sixth—Total number of both graded and paved streets in the city, 282,293.39 feet.

Seventh—Total number of feet of sewers now in use in the city, 87,070.50 feet. There is also in course of construction 13,878 feet of sewers that will be finished soon.

Appended find tabulated statement of each street graded or paved and sewers built.
W. E. MORFORD,
Street Superintendent.

STREETS IMPROVED FROM MARCH 21 TO DECEMBER 1, 1889.

Street.	Area.	Improvement.
Arcadia	Main to Los Angeles	Macad
Fort	Temple to Sixth	Bitumin
Fifth	Main to Hill	Bitumin
Fourth	Main to Hill	Bitumin
Fifth	Hill to Olive	Bitumin
Fort	Sixth to Seventh	Macad
Second (N/4)	Fort to Spring	Bitumin
Sonora	Main to New High	Bitumin
Second (S/4)	Main to Spring	Bitumin
Third	Main to Hill	Bitumin
Upper Main	Marchessault to Alameda	Macad
Ann	Main to east terminus	Graded
Alabama	Lake Shore to State	Graded
Adams	Main to Figueroa	Graded
Brooklyn	Figueroa to Swift	Graded
Collado	Diamond to Western	Graded
Court	Beaudry to Beaudry	Graded
Castelar	Walter to Aliso	Graded
Daly	Hawkins to Schieffelin	Graded
Daly	Lacy to Swan	Graded
Eleventh	Los Angeles to S. Pedro	Graded
Eighth	Main to Alameda	Graded
Kills	Figueroa to Toberman	Graded
Estrella	Washington to Kils	Graded
Flower	Twelfth to Pico	Graded
Hope	Fourth to Fifth	Graded
Hill	Pico to California	Graded
Hope	Pacheco to Washington	Graded
Hoff	Walnut to Water	Graded
Helman	Downey to Hoff	Graded
Lucas	Fourth to Diamond	Graded
Lucas	Main to Grand	Graded
Leocouveau	Downey to Hoff	Graded
Macy	The bridge to Bridge	Graded
Maple	Seventh to Eighth	Graded
Myrtle	Seventh to Eighth	Graded
Ninth	Orlando to Pavilion	Graded
Ottawa	Fort to Georgia Bell	Graded
Patton	Temple to Court	Graded
Seventh	Alameda to River	Graded
Seminary	Lucas to Lafayette	Graded
Santee	Eleventh to Twelfth	Graded
Sand	Castelar to Fort	Graded
Sotello	San Pedro to N. Main	Graded
Silver	Belmont to Lucas	Graded
Twelfth	Main to San Julian	Graded
Third	Main to Los Angeles	Graded
Waters	Temple to Court	Graded
Sonora	Downey to Arroyo	Graded
Belmont	Main to Figueroa	Graded
Park View	Second to Silver	Graded
First	Virginia to Belmont	Graded
Second	Figueroa to Lucas	Graded
Waters	Temple to Edgewood R'd	Graded

EXTENT AND COST OF IMPROVEMENT.

NAME OF STREET.	Length in feet.	Total cost.	Value of street.
Arcadia.....	214.97	1,290 35 47.77	
Fort.....	4,123.80	52,746 00 81.00	
Fifth.....	1,001.37	7,941 86 60.00	
Fourth.....	1,001.25	10,182 43 60.00	
Fifth.....	339.36	1,857 44 00.00	
Fort.....	608.23	4,834 36 80.00	
Sonora.....	382.50	1,829 41 00.00	
Second (N/4).....	164.20	1,222 41 37.31	
Second (S/4).....	334.97	1,000 00 60.00	
Third.....	1,044.37	11,225 43 60.00	
Upper Main.....	2,483.59	12,335 15 68.83	
Total paved and graded.....	11,589.61	\$104,637 15	
Ann.....	719.79	1,243 12 00.00	
Alabama.....	949.00	3,100 11 00.00	
Adams.....	2,338.02	5,970 05 82.50	
Brooklyn.....	493.60	790 52 00.00	
Collado.....	1,822.58	7,234 37 00.00	
Court.....	1,577.00	6,081 86 00.00	
Castelar.....	724.31	1,607 19 00.00	
Daly.....	678.50	436 92 00.00	
Daly.....	800.00	1,660 76 00.00	
Eleventh.....	1,810.00	3,801 00 00.00	
Eighth.....	6,061.41	13,731 11 80.00	
Ellis avenue.....	2,490.00	3,735 00 00.00	
Estrella avenue.....	1,380.04	3,174 06 50.00	
Flower.....	678.00	1,203 77 00.00	
Hope.....	645.97	2,961 83 00.00	
Hill.....	540.00	999 00 00.00	
Hoff.....	840.00	1,660 76 83.00	
Helman.....	781.00	2,340 00 00.00	
Lucas avenue.....	1,706.00	7,329 83 00.00	
Laurel.....	1,380.00	2,975 00 00.00	
Leocouveau.....	330.00	840 00 00.00	
Macy.....	1,422.80	2,895 10 00.00	
Maple.....	742.60	805 10 00.00	
Myrtle.....	787.90	1,121 71 00.00	
Ninth.....	338.70	546 69 00.00	
Ottawa.....	842.49	1,167 19 50.00	
Patton.....	965.41	2,316 52 50.00	
Seventh.....	3,282.00	7,123 95 00.00	
Seminary.....	573.00	2,843 87 50.00	
Santee.....	585.20	1,088 90 00.00	
Sand.....	646.00	975 24 00.00	
Sotello.....	745.00	986 20 00.00	
Silver.....	1,282.40	4,834 36 00.00	
Twelfth.....	2,309.59	5,536 48 00.00	
Third.....	430.00	1,399 90 00.00	
Waters.....	962.80	2,777 85 00.00	
Water.....	1,191.00	2,630 00 00.00	
Sonora.....	2,570.00	3,084 00 00.00	
Belmont.....	765.00	2,688 00 00.00	
Park View avenue.....	1,170.50	4,710 27 00.00	
First.....	1,471.00	3,822 08 50.00	
Second.....	1,380.00	3,488 00 00.00	
Waters.....	1,515.90	3,084 00 50.00	
Total graded.....	55,060.78	\$133,576 05	
Total both paved and graded.....	66,770.50	\$238,513 75	

SEWERS CONSTRUCTED IN THE CITY OF LOS ANGELES FROM MARCH 21 TO DECEMBER 1, 1889.

Street.	Area.	Length.	Size.	Manholes.	Flush tanks.	Total cost.
Aliso	Los Angeles to Alameda	461.10	8	1		\$338 00
Ann	New Main to San Fernando	581.00	8	1		454 50
Bellevue	Buena Vista to S. Philad'phia	1,364.50	10	4		1,754 19 1/2
Bernard	Buena Vista to Yale	744.38	8	1		833 06
Buena Vista	Bernard to Solano	2,315.30	10 1/2	8		2,983 23
Castelar	Alpine to Bellevue	1,304.75	8	2	3	1,106 57
Castelar	Bellevue to Solano	1,135.15	8	3	1	990 00
N. Philadelp'ia	Main to New High	1,145.60	10	1	1	1,232 00 1/2
Solano	Port to Castelar	4,450.50	10 1/2	12	3	6,318 79
Orange		642.30	8	1		609 09
Rossas		867 03	8	1	1	986 20 1/2
S. Philadelp'ia		632.60	8	2	1	740 08 1/2
Solano		242.00	10	1		\$21 90
Temple		555.0 0	10	2		\$436 00
Upper Main		636 06	8	1		547 75
Walters		828 4	8	3		919 43
Total.....		77,763 50				\$20,459 40 1/2

department compares with that of other cities:

CITIES.	Population.	Area in acres.	No. policemen.	No. of acres to each officer.	No. of inmates to each officer.
New York.....	1,750,000	36,500	2,278	8.10	533.60
Philadelphia.....	1,101,000	80,000	1,694	48.07	606.97
Chicago.....	800,000	23,680	1,145	20.68	698.32
Brooklyn.....	757,000	16,947	928	18.26	815.74
St. Louis.....	440,000	40,000	555	72.07	792.60
Boston.....	425,000	23,680	790	29.97	537.98
Baltimore.....	400,000	19,283	705	13.16	574.68
San Francisco.....	350,000	46,236	465	55.97	864.80
Cincinnati.....	335,000	15,300	414	37.10	786.03
Los Angeles.....	80,000	18,500	90	206.62	888.88

In this connection it may be well to state that the discipline of the force was never better than at the present time, nor the city in better condition from a police standpoint.

PARKS.

Report of the Board of Park Commissioners.

The Park Commissioners report that they assumed control of the parks of this city on their organization, March 23, 1889, and at that time found the Plaza Park and Sixth-street Park open to the public, and considerable progress made in preparing the 50-acre park in East Los Angeles for use as such, and but a commencement made in Westlake Park, several thousand trees set out in Elysian Park, and nothing done with Prospect Park. Since that time the following work has been done:

SIXTH-STREET PARK.

This park, being 600x330 feet, was found admirably kept and in good condition, and a favorite resort for the public. The principal improvements since made have been the setting out of trees and preparing for grass the surrounding sidewalks. The expense of this work and caring for the park has been \$1112.23.

PLAZA PARK.

The Plaza Park, being a circle of 210 feet in diameter, was found beautifully arranged and requiring no additional improvements. It has been so kept at a cost of \$381.65.

EAST LOS ANGELES PARK.

The 50-acre park in East Los Angeles was found to have had considerable preliminary work done therein, and the improvements since made consist of grading and graveling the drives and walks and the intervening ground, setting out trees, shrubs and flowers, and preparing lawns ready for the grass. Drives graded, 4100 feet, 36 feet wide; of which 1,900 feet have been gravelled; paths graded, 1000 feet, 10 feet wide.

In this park is the propagating house for all the parks, the cost of which is not included in the amount herein stated as the expense of the park. It amounts to \$3,094.91.

PROSPECT PARK.

A beautifully-located park in Brooklyn Heights on which nothing has been previously done, and containing two and a half acres and having a small brick-cemented reservoir in its highest elevation.

The ground work of this park has been completed, and consists of the grading and graveling of the walks, the placing of the water pipes, the setting out of necessary trees, shrubs and flowers and the starting of the lawns. Cost of labor and material, \$1,560.20.

WESTLAKE PARK.

This consists of 35 acres, and is surrounded by Seventh street, Park View avenue, Ward and Alvarado streets.

The commissioners found this park commenced, but in such a condition as to require a large expenditure for grading and banking up the shores of the lake, the building of rock-work for tool houses and embankments, the building of bulkhead and the setting in of the necessary waste pipe to drain the lake.

Almost the entire landscaping surrounding the lake, which has some 3000 feet of shore line, and lying between the interior driveway and the lake, is completed and planted out with trees, shrubs, flowers and vines of rare varieties, and a portion of the grass lawn growing. The water pipes are laid and completed inside of the interior driveway and the walks have been graded and gravelled.

The interior driveway has been graded and temporarily curbed and partially gravelled. The sidewalks along Park View avenue have been planted with greyilla and popper trees, and the ground is being prepared on the park side of Alvarado street.

In consequence of the improvement of this park, the city and property-owners have nearly completed the grading and graveling of the streets surrounding the park, which has greatly added

to its general appearance. Amount expended for labor and material, \$3627.92. A considerable sum has been donated by private parties and expended on this park of which the commission has no record.

ELYSIAN PARK.

This park, comprising over 450 acres of hills and valleys, and the park par excellence of the future, was found much in the state that Nature left it, there being about 35,000 trees—eucalyptus, pepper, pine and cypress—set out and growing therein, and that comprised the extent of improvements so far made.

Since that time there have been set out about 50,000 trees of different varieties, including eucalyptus of 27 varieties; live oak, pine of several varieties, pepper, Monterey cypress—covering an area of nearly 100 acres. These trees have been taken care of, and there has been roughly graded about one-half mile of roadways, to allow water to be hauled to the trees.

Surveys have been made in this park to a limited extent, but a topographical survey should be made so that the park can be intelligently laid out and trees planted in accordance therewith. The cost of labor and materials for this park has been \$3906.30.

CITY HALL PARK.

This is a piece of ground 47x165 feet adjoining the City Hall on Fort street, on which nothing had previously been done. It has lately been graded and drives and walks laid out, it being necessary to fill in the rear of the lot about two feet. The two shadiest corners have been filled with leaf-mold in order to set out ferns therein. This park is now ready for setting out trees, shrubbery, etc., so far as the ground is concerned. The drives and walks, however, should be paved to make the work effective. Cost of labor and material, \$364.75.

NURSERY.

The nursery is in the 50-acre park, and comprises a hot-house 15x50 feet, a lath house 30x50 feet, and 18 sashes for hot beds.

There have been two men employed in propagating trees and plants for the several parks and there have been produced 500 boxes of border plants, 10,000 trees and shrubs, 500 palms, and many thousands of other plants and flowers. Total cost for eight months, \$964.05.

RESUME OF EXPENDITURES.	
Sixth-street Park.....	\$ 1,112 23
Plaza Park.....	381 65
East Side Park.....	3,694 91
Prospect Park.....	1,560 20
Westlake Park.....	9,627 92
Elysian Park.....	3,906 30
City Hall Park.....	364 75
Nursery.....	964 05
General expenses.....	221 55
Total.....	\$21,833 49

CITY SCHOOLS.

Report of Superintendent Friesner for the School Year.

W. M. Friesner, Superintendent of the Public Schools of Los Angeles, presents his annual report to the Board of Education, of which the following is a synopsis:

At the close of the school year, June 30, 1889, the condition of the schools, in every respect, differs but little from that of the previous years.

The teachers labored faithfully, and performed their allotted work as well as possible under the adverse conditions of short hours and cramped accommodations.

Twenty permanent school-rooms—four on Chestnut street, four on Macy street, four on Tenth street, four on Montgomery street, two on San Pedro street and two on Grafton street—were erected during the year.

Notwithstanding this increase in the number of rooms there were at the close of the year 70 schools on half-day time.

The hope that new buildings might be erected during the summer vacation has not been realized, and now the schools are again in session; with 72 schools on half-day time; seven in ill-sited rented rooms and seven owned by the department, which are worse than the rented rooms, and should be abandoned at the earliest opportunity.

These figures show a necessity for 50 additional school-rooms at this time.

Of the \$200,000 worth of school bonds, voted on the 31st day of August last, \$100,000 worth have been sold, and the money is in the treasury. Needed sites have been selected, and contracts are about to be let for the erection of new buildings and additions to old ones. It is hoped that before the present school year ends every school will be well and comfortably housed and on full-day time.

The Superintendent discusses at some length the question as to whether the schools should be in session nine or ten months of the year, and arrives at the following conclusion:

My experience and observation for 20 years in school work convinces me

that more and better work can be done in nine months per year than in ten. The same work can be done more easily, too, in the shorter time, on the same principle that it is better and wiser to work six days out of seven.

In discussing the selection of teachers he deprecates the many false motives which come in to urge the election of applicants to positions, and he holds that it is better "to harden the heart" to everything except the one question, "Is the applicant a good teacher?"

In anticipation of inquiries, he presents the following information:

Salaries of principals, from \$95 to \$150 per school month; assistants in High School, \$115; other teachers, \$80 per month the first year; after that, \$80, \$85 or \$90, according to ability. Length of school year, nine months, from October 1st to the last of June.

Twenty-five to fifty teachers required annually to fill vacancies and supply new schools. The supply of strictly first-class teachers is not always equal to the demand.

Holders of primary certificates may teach in the first five or primary grades; holders of grammar-grade certificates in the next four, or grammar grades; holders of grammar-school-course certificates in the next three or High School grades. Two years' successful experience, or a Normal School graduate is required to teach in the first grade. One year's successful teaching is required for all other grades.

All certificates are issued by the County Board of Examiners.

In conclusion, Prof. Friesner pays a pleasant compliment to A. E. Baker, who took charge of the schools during October, November and December, 1888, during the absence of the Superintendent in consequence of sickness, and he also thanks all persons in any way connected with the schools who have contributed to their success.

Census Master's Report.		1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.
No. of white children between 5 and 17 years of age.....	3,115	3,370	4,088	4,276	5,070	5,544	5,900	7,384	10,300	10,301	10,301
No. of colored children between 5 and 17 years of age.....	2,302	2,620	4,194	4,231	5,138	5,584	6,090	7,457	10,092	10,740	10,740
Total number of children between 5 and 17 years of age.....	5,417	5,990	8,282	8,507	10,208	11,528	13,390	14,841	20,392	21,041	21,041
No. of children between 5 and 17 years of age who have attended public schools during the year.....	1,222	2,008	1,519	2,405	2,976	3,417	3,877	4,574	6,110	7,101	7,101
No. of children between 5 and 17 years of age who have attended private schools during the year.....	865	518	631	602	611	702	747	804	1,000	1,200	1,200
No. of pupils enrolled in the public schools.....	1,290	1,986	1,410	1,397	1,594	1,415	1,415	1,640	4,770	5,196	5,196
No. of teachers employed.....	1,794	1,921	2,252	2,075	3,470	4,111	4,080	4,445	1,230	1,230	1,230
Average No. of pupils per teacher.....	72.4	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5
Cost per capita on average daily attendance.....	29.14	29.14	29.14	29.14	29.14	29.14	29.14	29.14	29.14	29.14	29.14

THE LIBRARY.

Report of the Librarian, Miss T. L. Kelso.

Miss Tessa L. Kelso made the following report to the Trustees of the Public Library December 3d:

I herewith respectfully submit the annual report of the Los Angeles Public Library, which covers a period of eight months, dating from April 1st to December 1, 1889: The income of the library is derived from a "tax levy on all taxable property in the city, not to exceed 5 cents on each \$100 of the value of all real and personal property," and from book-borrowers' dues, at the rate of \$1 per quarter.

Following is a statement of the receipts and expenditures for the period named:

RECEIPTS.	
Balance on hand April 1, 1889.....	\$ 3,594 62
Balance from tax levy of 1889-90.....	298 40
(Transferred April 1, 1889.)	
Received on account of apportionment for fiscal year 1889-90.....	17,036 18
Dues and fines.....	519 26
Total.....	\$21,428 46

EXPENDITURES.	
Books and periodicals.....	\$ 3,540 89
Library expenses.....	2,233 60
Salaries.....	2,632 08
Balance in hands of City Treasurer.....	13,021 89
Total.....	\$21,428 46

The amount apportioned by the City Council for the fiscal year of 1889-90 was

\$18,368.05, of which sum it was conditioned that at least \$10,000 was to be expended for the purchase of books.

The figures showing the usefulness and history of the library are necessarily very incomplete, since three months of the eight were spent in the old quarters, where it was impossible to keep correct records of circulation or attendance, under the system then in use.

Upon removal into the present quarters in the new City Hall the library was closed for a period of two months, during which time the books were cleaned, repaired, counted, classified, numbered, book plates inserted, placed in position, shelf-catalogued in duplicate, and a card catalogue begun.

On Monday, the 2d of September, the new library was opened to the public, completely and elaborately fitted with new furnishings in its mechanical make-up.

The book account is as follows:

Number of volumes in the Library	
September 2, 1889.....	6,356
Number of volumes added to Library to December 1, 1889.....	4,771
Total.....	11,127
Discarded.....	98
Lost and stolen.....	1- 99

Number of volumes in Library December 1, 1889..... 11,029

The large addition to the library during the past three months as shown in the foregoing figures, namely, 4771 volumes, is being daily supplemented by the arrival of other books purchased by the board.

In all such purchases due regard has been paid to the needs of the library in the different departments of history and travel, biography, literature, fine arts, natural science, philology, fiction, sociology, theology, philosophy and reference, and the fund is being expended in proportion to the importance of the several classes named.

There are 189 periodicals received in the library, which are apportioned as follows: On file in reading rooms..... 73 On file at delivery desk..... 73 For use at home..... 38

The circulation of books and periodicals for the three months from September 2d to December 1st is given below:

	Sept.	Oct.	Nov.	Total.
Reading-rooms.....	3,418	3,570	4,451	11,439
Home.....	1,415	2,277	2,610	6,302
Totals.....	4,833	5,847	7,061	17,741

In addition to this registered number of applications at the delivery desk, there is an average daily attendance of over 100 readers who make use of the periodicals on file in the reading-rooms, making the total number 29,941, which allowing for natural increase at a moderate estimate of 10 per cent. will give a grand total of 181,740 readers for the year.

In rearranging the library the Dewey system of classification has been very closely followed. The addition of so many new books, making it advisable to publish finding lists, type-written shelf sheets of the different classes were inserted in neat covers, lettered with class and number, e.g.: Class 920, "Biography," etc., and have proved to be quite satisfactory as a temporary substitute for the finding list. It has also been the means of impressing the scheme of classification upon the minds of the readers in a remarkable degree; in fact, the use of these sheets, bound in this manner, will be an important training for the intelligent use of the card catalogue.

The circulation of periodicals for home use has proven to be one of the most satisfactory features of the library. First-class periodicals suggesting and creating a demand for a better class of books, and accomplishing much toward counteracting the excessive percentage of fiction read.

The addition of a very complete collection of excellent photographs of famous paintings, sculptures, architectural subjects, etc., promises to become of the highest importance as a part of the education of the pupils of the public schools, aside from the advantages to the general public.

Add to this the library of vocal and instrumental music now being formed, and our community will find in the library a means of culture and convenience that will, in a great measure, compensate for the disadvantage of being so far geographically removed from the great supply centers.

Among the accessions of the library are 1300 volumes of United States public documents, in which there is a rich fund of information bearing upon the interests and history of our section of the country. It is our aim to classify and index these volumes to the degree of usefulness that their importance warrants.

Our reference department has been enriched by the acquisition of very many complete sets of the leading American and English periodicals, which, with Poole's index to the same, alone afford the public a mine of information equal to that of any ordinary reference library.

That our citizens are awakening to the importance of having a good library in their midst is apparent from the interest expressed and in the increased apportionment for its support, and it is regretted that a report at this time can give but a meager idea of how well founded this realization is.

As an evidence of the faithfulness of the staff of employees, I need only to draw your attention to the fact that within the past three months 4771 volumes have been added to the library in addition to answering the demands created by thousands of readers.

Water Overseer's Report.

The report of the Water Overseer shows that there are 15 zanjas owned and controlled by the city, aggregating some 75 miles in length, of which about 25 miles are piped, said pipes varying in size from 4-foot brick conduits to 8-inch cement pipes, 22-inch pipes being mostly used for carrying two heads of water. The total revenue from sales of water, etc., during the year was \$11,991.15, divided as follows: Sales of water for irrigating purposes, \$11,083.50; pipe lines for domestic use, \$655; boats on reservoir No. 4, \$29; fishing permits, \$144; cash, \$38.65. The total expense of cleaning and repairing

zanjas during the year was \$10,100.18, but much of this work was for a permanent character, and the system was greatly improved by it and its earning capacity largely increased. The total expense of the Nichols ditch was \$1,598.50, from which there was no revenue, it being kept up for the benefit of the Westlake Park.

Superintendent of Buildings.
The report of the Superintendent of Buildings shows that since the 1st of August last, at which date he entered on the discharge of his duties, up to November 30, 1889, 194 permits were issued, of which 20 were for the removal of old building. The cost of the improvements was \$759,575, and fees collected for issuing permits amounted to \$386.50, which has been turned into the city treasury. The following is a summary for the four months: Total number of building permits issued, 194; total cost of improvements, \$759,575; highest cost of any one building, \$150,000; lowest, \$75; average, \$3915.33; brick buildings, 27 in number, \$530,957; number of frame buildings and repairs to same, 103 in number, \$182,795; highest-priced dwelling, \$11,000; number of cottages costing \$1000 or less, 53.

This department was the latest to come into operation under the new charter, but it has already demonstrated its utility, and promises to become indispensable in the administration of city affairs.

City Attorney's Report.
The report of the City Attorney shows that there were pending in the Superior Courts when the present incumbent came into office six cases against the city, and that 19 new suits have been instituted during the year, together with an abstract giving the character of each suit, and its status before the courts at the present time. Besides this, 1857 cases were prosecuted in the Police Courts, of which 1618 were convicted and 219 dismissed and the defendants discharged. The total number of days of imprisonment for the above convictions was 6228; fines and costs imposed and collected to March 21, 1889, in City Justices' Courts, for violation of the city ordinances, \$1811; fines and costs imposed and collected since March 21, 1889, for all offenses in the Police Court, \$7203.30; total, \$8514.80.

City Clerk's Report.
The report of the City Clerk shows that the number of licenses issued and for what amount, during the year ending November 30, 1889, as follows:

MONTH.	Number.	Amount.	Total.	Total.
1888.				
December.	2,853	\$19,226.00	\$18,377.25	\$ 815.75
1889.				
January.	2,741	18,328.00	16,721.11	1,606.89
February.	2,731	18,479.00	16,581.50	1,897.50
March.	2,574	17,739.00	16,138.74	1,600.26
April.	2,602	16,962.50	16,064.00	898.50
May.	2,635	17,755.00	15,610.50	2,144.50
June.	2,528	16,760.00	15,368.00	1,392.00
July.	2,659	16,215.00	15,538.00	677.00
August.	2,554	16,737.00	16,075.00	662.00
September.	2,482	16,816.00	16,281.00	535.00
October.	2,455	16,141.00	15,549.00	592.00
November.	2,472	16,134.00		

Chief of the Fire Department.
The report of the Chief of the fire department shows that the fire protection system consists of 80 men, seven steam fire engines, eight hose carts, one Hayes hook and ladder extension truck, the Richmond fire alarm system, 102; by telephone, 50; still alarms, 14. The total fire loss for 11 months was \$81,220; the large single fire was the tobacco store of William Liebes & Co., at No. 213 North Los Angeles street, on the 16th of April, when the damage amounted to \$10,000.

City Tax Collector.
The report of the City Tax Collector gives the collections of his office from December 1, 1888, to November 30, 1889, as follows: Total collections for taxes, \$483,714.04; licenses, \$191,779.50; deeds, \$57; dog tax, \$448; advertising delinquent tax list for 1888, \$2107.50; making a grand total for the 12 months of \$678,106.04.

Sealer of Weights and Measures.
The report of the Sealer of Weights and Measures shows collections of \$561.20 as fees from October 1 to November 30, he having entered on the discharge of the duties of his office on the first named date. This money has been deposited with the City Treasurer, as is shown by receipts on file.

POPULATION AND WEALTH.

Striking Figures and Comparisons from Reports.

The growth of the population of Los Angeles during the past 40 years is marvelous. Here are the figures since 1850:

1850 (Americans).....	30
1861.....	6,500
1870.....	8,000
1880.....	11,183
1883.....	20,500
1886.....	65,000
1887.....	75,000
1888.....	80,000

The figures for 1870 and 1880 are those of the United States census. Those of subsequent years are based on the estimates of water companies, the school census and directory publishers. The directory of Los Angeles, published in the summer of 1888, contained 29,526 names. Multiplying by three, this would give a population of 88,578.

Another estimate: There were registered for the Presidential election in Los Angeles, 14,776 votes. Multiplying this by six—a fair figure—would give 88,656—within a fraction of the same number. Taking a conservative view, it is safe to say that the present population of Los Angeles is not less than 80,000.

The county vote at the Presidential election was 30,336. Calculating this in the same manner, we find the population of the county to be 182,016. We may expect the census of 1890 to give Los Angeles city 100,000 population, and the county over 200,000.

Los Angeles is now far ahead of any other county in the State except San Francisco, in point of valuation of property. Here are the figures for the eight wealthiest counties:

San Francisco.....	291,700,443
Los Angeles.....	84,376,319
Alameda.....	71,596,182
Santa Clara.....	53,112,682
San Joaquin.....	38,802,606
Sacramento.....	34,460,174
San Diego.....	31,560,918
Sonoma.....	31,232,671

The assessment of Los Angeles city for the present year, after equalization, amounts to \$46,997,101. The bonded indebtedness is \$667,000, and the tax levy \$1.10 on the \$100. The assessment compares with previous years as follows:

Years.	Total Value.
1881-'2.....	\$ 7,637,632
1882-'3.....	9,308,447
1883-'4.....	12,235,053
1884-'5.....	14,731,215
1885-'6.....	16,432,436
1886-'7.....	18,451,525
1887-'8.....	27,803,924
1888-'9.....	39,479,172
1889-'0.....	46,977,101

REALTY AND BUILDINGS.

REVIEW OF THE YEAR'S TRANSACTIONS—COMPARISONS.

Total Sales of the Year—Statistics Furnished by Architects and the Superintendent of Buildings.

REAL estate transactions for the year 1889 show a grand aggregate of over \$35,000,000.

These figures are necessarily approximate, as the table is closed December 20th, in order to insure its publication in this number. While the aggregate of transfers for 1889 is less than 1887 and 1888, it still betokens a healthful activity, and for a county of 150,000 population, would be regarded in most States as phenomenal. The late lamented "boom"—which was nothing more nor less than a speculative craze in real estate—found its climax in July, 1887, in which month the transfers amounted to \$12,071,057! It could not continue longer in this high-pressure principle, and it is well for the country that it did not. Prices had been run up in many cases beyond intrinsic values, and there was less buying for legitimate investment than for speculation. When the reaction came, those who had been carried away by the furor saw the necessity of getting back to solid business principles. Then began a system of "hedging" that has not been equaled in the history of the country. So skillfully was it accomplished that our real business interests were in no manner crippled. There were very few disastrous failures, even among the most extensive and most reckless real estate operators. Many individuals who had purchased at high prices, depending on quick turns to make payments, lost considerably, but there was not a failure of a single bank or business firm in the city of Los Angeles. One bank in the country which had loaded up too much with real estate and debts went down, but the chances are that, in the settle-

ment of its affairs, it will pay dollar for dollar. There was no panic or collapse of any kind.

There was a considerable recession of prices, most heavily felt on outside lands, where fields had been cut up into streets and 25-foot-front lots with the expectation of making cities out of whole dirt. Inside property in the city of Los Angeles held its own remarkably well, and, in many instances, could be sold today at better prices than it would have commanded in the summer of 1887. In other instances there has been a shading down from 15 to 30 per cent. On the whole, however, there is a fine feeling, and few have sold at reduced values unless compelled to do so by the exigencies of debt. A great spirit of accommodation has been manifested on the part of creditors, and the result has been that many debtors have been enabled to pay their way out with comfortable savings on hand.

The transactions of 1888 were still heavy, by reason of the fact that many "boom" deals were closed up; second and third payments being made, at the end of which the instrument of conveyance was placed on record.

The transactions of 1889, while still less than 1888, indicate a healthy activity, and probably contain more new transactions than the preceding year. It may be said now that real-estate operators are "clothed and in their right mind," and that they buy more for legitimate investment and improvement than ever before. Real estate is found to have a solid substratum of value, after all, and it can now be bought at figures which promise an enhancement within a year or two, and a legitimate return from the investment at once. The present time offers a golden opportunity to secure a desirable foothold in realty, either in the city or country. Prices are really lower in Los Angeles today than in most other cities of the Union of equal size and promise, while the most desirable fruit-growing, farming and villa lands outlying can be had for a little less than intrinsic values.

The transactions of 1889 are as follows:

	Total No. Transfers.	Total Amount.	Under \$1,000.	Over \$1,000.	Total.
1889.					
January.....	2,002	\$14,763,781	\$ 3,414,476		
February.....	1,944	13,434,684	3,075,744		
March.....	2,114	15,928,790	3,556,721		
April.....	1,906	16,567,633	4,543,159		
May.....	1,661	16,567,633	3,556,721		
June.....	1,519	16,567,633	2,470,161		
July.....	1,436	16,567,633	2,470,161		
August.....	1,167	16,567,633	1,839,947		
September.....	1,143	16,567,633	1,648,799		
October.....	1,236	16,567,633	1,530,577		
November.....	1,222	16,567,633	1,530,577		
December.....	1,182	16,567,633	1,530,577		
Totals.....	18,545	\$146,025,611	\$35,300,463		

* Approximated.

COMPARISONS.

Following are the transactions, by months, for the past three years:

Month.	1887.	Amount.	1889.
January.....	\$4,998,090	\$6,627,526	\$3,414,476
February.....	4,865,057	7,601,829	3,075,744
March.....	5,234,455	7,589,117	3,556,721
April.....	7,512,124	5,673,051	4,543,159
May.....	8,163,327	6,506,145	3,556,721
June.....	11,491,062	5,214,636	2,470,161
July.....	12,071,057	4,503,529	2,470,161
August.....	11,505,711	4,044,211	1,839,947
September.....	9,872,948	3,772,074	1,648,799
October.....	8,121,486	3,751,533	1,530,577
November.....	5,819,646	3,415,959	1,530,577
December.....	7,323,220	3,929,480	1,530,577
Totals.....	\$96,730,192	\$62,813,164	\$35,300,463

* NOTE.—Approximated.

BUILDINGS.

Concise Statement of the Improvements of 1889.

[Reported by architects, covering the time from January 1st to August 1, 1889, and including structures commenced or completed within that period, additions and improvements, all within limits of Los Angeles city.]

BY KYSER, MORGAN & WALLS, ARCHITECTS.

Mansion house, cor. Ceres and 5th sts.	7,000
G. Owens, Hush st., cottage.....	1,800
G. Schroder, Palm st., cottage.....	1,300
Church of the Unity, Fifth st.....	17,000
Capitol Mills, Upper Main st. (additions)	8,000
24 and 26 S. Spring (alterations in stores)	2,300
T. Gross, 119 S. Main st., 3-story brick	11,000
E. Germain, 111 S. Main st., 3-story brick	11,000
J. Lang, 115 S. Main st., 3-story brick	11,000
H. C. Dillon, residence.....	9,500
E. Germain, S. Los Angeles st., 2-story	14,000
C. Hettig, Palm st., cottage.....	17,000
E. Germain, Hope and 11th sts., additions, residence.....	5,500
Miss Hammond, Pearl st., residence.....	6,000
W. Wright, Hill st., near 10th, residence.....	2,800
E. Germain, Los Angeles st., Business block, 3 stories.....	36,000
H. Newhall, Dana st., additions.....	1,800
Gus Knecht, Figueroa st., residence.....	5,000
Belman, Hans & Co. office.....	1,800
County Hospital, executive building.....	9,500
A. Briawater estate, Memorial Chapel	25,000
REPORTED BY J. C. NEWSOM, ARCHITECT.	
Elizabeth Chauvin, brick block.....	20,000
A. K. Chipman, residence.....	5,000
R. T. Henry, cottages.....	5,000

T. Rhodes, cottage.....	5,000
M. M. Morrison, residence.....	10,000
John H. Bryan, alterations.....	8,000
C. A. Sumner, residence.....	6,000
George Shultz, residence.....	25,000
J. C. Newsom, residence.....	5,000
M. W. Connor, residence.....	25,000
C. C. Allen, residence.....	5,000
E. F. C. Klokke, residence.....	12,000
J. B. Winston, residence.....	5,000
Edward Hildreth, residence.....	17,500
C. H. Seaton, residence.....	10,000
S. G. Flemming, residence.....	10,000
T. B. Henry, flats.....	10,000
Thomas Ruddick, residence.....	10,000
Frank Flint, residence.....	5,000
Mrs. McGinnis, residence.....	5,000

REPORTED BY S. I. HAAS, ARCHITECT.

City Hall building, Fort street.....	\$202,000
W. C. T. U. building, Fort street.....	50,000
O. W. Childs, residence.....	15,000
A. W. Barnes, store.....	7,000
N. W. Stowell, block.....	40,000
L. J. Thompson, residence.....	2,500
Bethany Presbyterian Church.....	5,000
C. E. Thom, store building.....	7,000
E. G. Galt, residence.....	2,500
H. Cohen, residence.....	2,500

REPORTED BY A. M. EDLIMAN, ARCHITECT.

O. J. Weil, Main st., bet. 1st and 2d, 3-story brick.....	\$ 24,500
M. A. Newmark, Spring st., alterations, residence.....	1,400
H. Newmark, cor. Eleventh and Hope sts., frame stable.....	4,000
ave., cor. 11th and Grand	35,000
Mrs. E. P. Hersey, cor. Diamond and Williams sts., residence.....	1,800
K. Cobb, Agricultural Park tot., double tenement.....	2,000

REPORTED BY BROWN & BRADBEER, ARCHITECTS.

Pico Heights, Rosedale district, school-house.....	4,500
Boyle Heights, Belvidere district, school-house.....	4,000
R. L. Cases, Newhall st., residence.....	2,150
R. S. Hays, Newhall st., residence.....	2,540
N. L. Wheelock, Newhall st., residence.....	2,110
Wm. J. Archer, Newhall st., residence.....	1,240
Arthur G. Newton, Little Rock ave., residence.....	6,500
Dr. G. R. Weeks, Newton st., residence.....	2,500
C. C. Briggs, Central ave., residence.....	2,480
J. C. Hanna, Central ave., residence.....	2,475
C. D. Dean, Maple ave., residence.....	1,000
A. F. Trechman, Verdon ave., residence.....	3,100
H. W. Poldexter, cor. Fower and Jackson residence.....	3,120
M. C. Westbrook, Ocean View ave., residence.....	2,800
William H. Neanderker, Manhattan ave., residence.....	3,575
W. A. Taylor, Burlington ave., residence.....	3,375
John Lazarevich, Summit ave., residence.....	3,300
George Bradbeer, King st., residence.....	1,350
Howell & Craig, Los Angeles st., brick block.....	20,000
J. Oddous, Alameda st., brick building.....	5,300
Mr. Botello, Bellevue ave., barn.....	1,000

REPORTED BY W. B. NORTON, ARCHITECT.

Dr. M. L. Moore, near Pearl and 9th sts., residence.....	6,000
E. B. Miller, Spring, bet. 1st and 2d, 4-story brick.....	40,000
George Cummings, Boyie ave. and 1st st., 4-story brick.....	22,070
Mary A. Wilson, Wooten tot. residence.....	4,500
Mrs. Sherer, San Pedro st., 2-story brick.....	4,400
REPORTED BY DORN & SLOCUM, ARCHITECTS.	
S. A. Matereon, California st., flats.....	9,000
Behr & Meyers, Los Angeles st., warehouse.....	10,000
A. M. Hough, 6th and Hill sts., Hotel Brunswick.....	18,000
John Dunsmoor, Figueroa and York sts., dwelling.....	2,500
T. B. Rhodes, Grand ave., dwelling.....	3,000
W. B. Nisbet, Bellevue ave., dwelling.....	1,000
John P. Culver, Grand ave., dwelling.....	3,500
Frances Bates, Santee st., dwelling.....	3,500

REPORTED BY FRANK J. CAPITAIN, ARCHITECT.

Rev. P. Harnett, Stichel and Baldwin sts., Sacred Heart Church.....	25,000
Louis Roeder, Spring st., bet. 1st and 2d sts., additions.....	6,000
Louis Measner, New United States Hotel, additions.....	2,500
Philadelphia Brewery, Aliso st.....	180,000
Luca Scisich, 1st and San Pedro sts., 2-story brick.....	11,000
Rev. J. T. Bartsch, Santee st., bet. 11th and 12th, frame church.....	3,500
Louis Phillips, Phillips block, Spring st., new elevator and repairs.....	9,000
Convent Immaculate Heart, Pico Heights, 3-story brick.....	60,000
Pierre Laroude, cor. of 1st and Spring sts., alterations.....	8,000
J. J. Schaefer, Adams st., bet. Figueroa and Grand avs., residence.....	12,000
Frank Sabich, Figueroa, bet. Adams and Ellis avs., stable and carriage-house.....	2,800

REPORTED BY J. C. NEWSOM, ARCHITECT.

Ed McLaughlin, Los Angeles st., bet. Commercial and Aliso, three 3-story stone fronts.....	35,000
R. Jellner, Ocean ave. and Oak st., residence.....	3,000
P. S. Brosius, 1st and Wellington sts., four 3-story brick buildings.....	11,000
D. Waldron, Laurel and Main sts., residence.....	8,500
T. G. Ryan, Brookhurst, near Anaheim, additions.....	2,000
Chas. Hoffman, 11th and Denver ave., cottage.....	2,000
G. C. Perret, cor. 3d and Spring, 3-story brick.....	20,007
Frank Sabich, Figueroa and Adams sts., repairs.....	600
Pierre Nicolas, cor. Upper Main and Marchessault sts., 2-story brick.....	9,000
Ed McLaughlin, Commercial and Wilmington sts., brick addition.....	4,000
Fred Haslam, Adams st., between Grand ave. and Main, residence.....	3,000
Pierre Nicolas, cor. New High and Marchessault, two-story brick.....	6,500
L. Lichtenberger, Main near 1st, alterations to stores.....	2,500

REPORTED BY CURLETT, RISEN AND CUTHBERTSON.

Los Angeles county, Port, Temple and New High, courthouse..... 600,000 |

Mrs. Bertha Saunders, Hope near Pico, residence..... 6,000 |

Los Angeles Orphan Asylum, Boyle Heights..... 150,000 |

COMMERCIAL BODIES

THAT LOOK AFTER THE GENERAL AND LOCAL WEAL.

Board of Trade and Chamber of Commerce—A Glance at Their Efforts—Local Organizations.

SEVERAL commercial bodies of standing and importance lend their efforts to the advancement of public interests.

The Board of Trade is an organization of the business men of this city for mutual protection in business interests and promotion of public enterprise. It is a corporation, having been incorporated in March, 1883. Its management consists of a board of six directors, and its officers are a president, vice-president, secretary, treasurer and attorneys.

To give some idea of the great amount of work that is done, outside of the great number of letters, resolutions, etc., regarding public matters, there have been this last year claims filed in the secretary's office amounting to \$99,902.82. Nearly one hundred cases have been adjusted by the board, and \$32,808 have been paid out in dividends. Many differences between the debtor and creditor are adjusted without the aid of the court, and therefore a great amount is saved to the parties for costs.

The officers and directors for the present year are: S. B. Lewis, president; J. V. Wachtel, vice-president; T. H. Ward, secretary; L. N. Breed, treasurer; Graves, O'Melveny & Shankland, attorneys; directors, S. B. Lewis, C. Seligman, H. Jevne, L. N. Breed, George E. Dickson, J. V. Wachtel.

CHAMBER OF COMMERCE.

Review of Its Efforts and Accomplishments.

Maj. E. W. Jones, president of the Chamber of Commerce, furnishes the following: The work of the Chamber of Commerce for the past year has been in part in the following matters:

In endeavoring to secure such a United States public building as would be a credit and ornament to our city, and adequate to the necessities of the Government at this point. This seems likely to succeed, as the Supervising Architect of the Treasury has recommended an increase of the appropriation to \$500,000, and our Representative expresses confidence that the increase will be granted.

In strenuous efforts to procure larger recognition of our need of a harbor by sending to the departments and to Congress a large mass of statistics with regard to San Pedro harbor and escorting of several parties of Senators and Congressmen to that port and describing to them the character of the improvements desired.

In endeavoring to bring about increased cultivation of land in Los Angeles county.

In urging the passage of such laws as will enable us to collect our taxes semi-annually.

In urging the repeal of the mortgage tax law.

In urging the passage of the Reform Farm Bill and the location of the Reform School near Los Angeles city.

In reopening trade relations with Inyo county, awakening the interest of the Carson and Colorado Railroad Company in the extension of its road in this direction, bringing its president here to look over the situation, and keeping the project alive.

In awakening interest in sugar-beet raising, holding correspondence and interviews with the leading beet-sugar men of this coast, and procuring and furnishing seeds and information to hosts of interested persons.

In endeavoring to secure the erection of crude sugar works here.

In procuring and publishing reliable information with regard to low-priced lands; issuing 10,000 lists of such lands and scattering them broadcast, setting at rest the claim that we had no lands at reasonable prices.

In agitating the building of a railway from the coal and iron fields of Utah, and in obtaining the best information to be had, of the intention of Union Pacific and other railway companies with regard to the same. In numerous interviews and much correspondence with persons interested and well informed on the subject, and in setting forth the advantages of building to this point.

In acquiring membership and in-

fluence in the State Board of Trade; providing for displays of the Los Angeles county products in the rooms of the board, and in the first and the "New California on Wheels," keeping up a creditable and the only citrus exhibit on the former traveling exhibition, and sharing actively in all the other work of the said State Board since our connection with it in March last.

In working for a combination of Southern California commercial bodies, similar to the State Board of Trade, the setting up of a Southern California Industrial Exposition and the sending out of a "Southern California on Wheels" so that this section might, as it ought, be independent of the rest of the State as far as possible in all such matters, inasmuch as the people of the rest of the State are as inimical to every interest of Southern California as the people of Mexico or any other foreign nation.

In presenting the subject of our arid lands in proper form to the Senate committee sent here to investigate them, and furnishing said committee with information with regard to irrigation in this county; in entertaining said committee suitably, as well as the Senate Committee on Our Relations with Canada on its visit to Los Angeles and San Pedro harbor.

Our Representative in Congress has been appointed chairman of the Committee on Arid Lands, from which we should reap considerable benefits.

In this connection we have been asking that the surveys of arid lands and reservoir sites be extended at as early a date as possible to this region.

In active cooperation in the work of the Commercial Convention, held at San Francisco, and in the resulting organization of the Pacific Coast Board of Commerce.

In aiding in the forming of the bank syndicate for the purchase of the local wine-grape crop, which has brought the grape-growers past a crisis and enabled them to sell their crops at a better price.

Also, in aiding the sweet-wine makers in their efforts to get relief from the oppressive operation of the internal revenue laws.

In getting the Citrus Fair for this section located here, and in awakening interest and trying to insure its success.

In getting the next meeting of the State Horticultural Society held here, in connection with the Citrus Fair, which that society promises to make the best meeting "ever held in the State."

In inviting, escorting and entertaining the members of the National Grange and their friends.

In correspondence, etc., with the railway authorities with regard to passenger and freight rates and reports of traffic, and with people from all parts of the country with regard to the inducements which Southern California holds out to those who wish to come here.

In conferences with people who wish to engage in manufacturing and other enterprises here.

In collecting and compiling statistics of Los Angeles city and county, and distributing the same in printed form, for the purpose of informing the outside world of the condition and resources, and the advantages we offer for homes and investment, and of removing the unfavorable impression with regard to us that has prevailed throughout the rest of the country.

In this work we have sent out about 30,000 pamphlets, etc. And in preparing for similar work for the coming year, we are accumulating, through our standing committees, a mass of information on local commerce, manufactures, lands and crops, mining, motive powers and fuel, immigration, and other subjects of great value.

It will be seen from this résumé that the scope of the chamber work is large; at the same time it is wholly within its province. We cannot leave any portion of it unconsidered and satisfy the demands of the community. We make no drafts upon our people for any but absolutely necessary expenses. We are not organized to furnish pecuniary aid to any enterprise, and we endeavor to further any undertaking believed, after careful examination, to be of public benefit by our indorsement, and to keep our people awake to their interests in the matter of harbors, railways, public buildings and all affairs of any magnitude. Our newspapers are great forces in the same work, but there is a field which newspapers cannot fill—that of furnishing a medium and a machine for the transaction of actual business, a place where the people can meet and counsel with each other and a bureau of information and action upon questions of public importance.

The Chamber of Commerce of Los Angeles is not, and never has been, making any effort to revive the so-called "boom," but it is endeavoring to so stir up the energies of the people that the evil effects of wild speculation may be overcome and solid, wise and widespread prosperity prevail about us.

LOCAL ORGANIZATIONS.

Boards in the Eastern, Western and Southern Suburbs.

The West End Board of Trade was organized on March 14, 1883, under the name of the West End Property-owners' Union. The first few meetings of the union were held in the Temple-street engine-house; afterward a commodious room was secured and fitted up at 1210 Temple street. Here the organization now known as the West End Board of Trade still meets regularly on Wednesday evening of each week.

The object of the board is to obtain needed public improvements for the section of the city represented by its membership, and to secure the establishment of mercantile and manufacturing industries. The board has steadily increased in membership and usefulness. There are now upwards of 70 members. H. C. Register has been president of the board for the past year.

D. C. Morrison is the present secretary. The following are the committees, with the present chairman of each: Street Committee, J. Mills Davies, chairman; Sewer Committee, Julius Lyons, Esq., chairman; Fire and Water Committee, E. Edgar Galbreth, Esq., chairman; Committee on Parks, Col. C. E. Dailey, chairman; Committee on Schools, A. M. Ellsworth, chairman; Mercantile and Manufacturing Committee, Daniel Innes, chairman; Gas and Light Committee, A. M. Ellsworth, chairman.

Much good has been accomplished through the efforts of the board in attracting the attention of the proper authorities to the necessities and requirements of the territory south to be served by the board, and in securing better improved streets, abatement of nuisances, better supply of water, protection against fire, better distribution of light, development of parks, and in a more thorough understanding by the public of the workings of the city government.

There are about 10,000 inhabitants in the district included by the board, and about 2000 voters, but as yet the district has but a small representation in the city and county government.

Crown Hills.

The Crown Hills Board of Trade is an organization recently formed. It devotes its attention chiefly to a section of the West End of the city, from Temple street on the north to Ward street on the south, and from Bunker Hill avenue on the east to the west city limits. It has a membership of over 60, and the officers are as follows:

President, C. M. Wells; first vice-president, A. McFarland; second vice-president, N. S. Averill; secretary, I. B. Newton; treasurer, E. H. Hutchinson; Executive Committee, Jesse Yarnell, M. H. Merriman and B. E. de Hart.

East Side.

The East Side Chamber of Commerce, which was formed during the past year, is a large and influential body, with M. D. Johnson its president and a membership of over 100.

It takes especial cognizance of public matters affecting East Los Angeles, and has been instrumental in starting and furthering many important enterprises.

The officers are: M. D. Johnson, president; C. N. Earl, vice-president; Sherman Smith, secretary; L. M. Brown, financial secretary, and W. W. Stockwell, treasurer.

The East Side Board of Trade is an older organization, which has done much good in its day in substantially the same channel, but its meetings have lately been suspended.

Boyle Heights.

The Boyle Heights Board of Trade is another local organization which jealously promotes and guards the interests of the Boyle Heights section. The president is W. H. Workman, the father of this flourishing suburb.

South Side.

The southern suburbs of the city, including Washington street and the University section, also has an organization known as the South Side Board of Trade.

Pineapple Growing.

There is at the present time a movement on foot to determine the best way of growing to perfection this valuable and delicious fruit. There is no reason to doubt but that, with proper care and attention, and a sound, practical knowledge of this industry, that large results would follow. A gentleman who has had some years' experience in Natal states that our soil, climate and general atmosphere conditions are well adapted for this plant. It is a mistake to think, as many do, that any one can grow this or any other fruit without some practical experience. A certain soil is required, and there are many places in our neighborhood where he feels sure that success would be achieved and a large profit made by the producer.

TRAFFIC.

STATISTICS OF RAILROAD AND EXPRESS COMPANIES.

The Amount of Freight Forwarded by the Southern Pacific and Santa Fe Lines—Telegraphic Business.

ELEVEN distinct lines of railroad focus in Los Angeles, making it the most important railroad center in the State. Statistics of the principal systems are here given:

THROUGH FREIGHT FORWARDED, 1889, FROM LOS ANGELES STATION, SOUTHERN PACIFIC COMPANY.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Asphaltum.....		253,390	21,000	49,750		42,500	147,340	81,690	320,640	2,420	0	0	108,000
Beans.....	445,280		107,000	25,750				41,650	59,640	3,000,420	32,595	72,895	321,722
Borax.....		52,050	20,520			30,280	4,510	0	24,320	2,517,102	9,587	282,895	617,122
Bran.....	47,050			29,120	2,440	30,280	48,220	0	59,640	107,200	10,192	20,192	8,204,944
Canned goods.....					2,440	88,020	34,150	1,470	24,320	45,341	45,341	54,000	215,190
Empty packages.....				27,350	2,250	40,700	187,620	1,470	1,470	2,527	4,527	4,527	24,527
Fruit, dried, etc. in jars.....	6,540	2,700	930				107,330	182,850	1,470	21,710	12,785	12,785	182,850
Fruit, fresh, etc. in jars.....	138,000	585,670	2,275,500	3,101,050	2,824,340				20,000				13,222,740
Grain.....		29,050	0	10,150		107,500	40,550	40,550	40,550	146,700	4,725	4,725	48,600
Hides.....	29,050	81,500	20,350	10,150	20,350	107,500	40,550	40,550	40,550	146,700	4,725	4,725	48,600
Lumber.....	24,400	81,320	20,350	10,150	20,350	107,500	40,550	40,550	40,550	146,700	4,725	4,725	48,600
Meat.....	31,100	83,050	62,230				103,140	42,700	106,110	24,527	6,310	6,310	84,894
Meatcanneries.....				44,450	90,250	104,050	103,140	42,700	106,110	24,527	6,310	6,310	84,894
Nuts.....	22,830	20,000		21,000	44,440	301,430	614	0	43,950	10,192	2,517	2,517	176,688
Vegetables.....	47,820	20,000	470,000	321,700	313,440	313,440	614	0	43,950	10,192	2,517	2,517	176,688
Wine.....	135,840	182,850	81,940	301,940	282,895	182,850	182,850	182,850	182,850	182,850	182,850	182,850	1,828,500
Wool.....	83,520	0	72,450	0	0	0	0	0	0	0	0	0	0
Total.....	1,038,000	1,705,000	3,214,000	4,767,200	4,241,500	3,810,250	1,650,400	774,830	1,907,700	6,072,120	3,508,400	2,830,450	24,403,340
													Estimated in pounds.

fruits and vegetables, and honey in pounds.

From July 15, 1888, to June 30, 1889:

Oranges	33,064,000
Lemons	46,000
Other fruits and vegetables	22,014,000
Honey	1,576,000
Total	56,660,000

Southern California Railway Company.

Statement showing number of passengers carried:

For the year ending June 30th: 932,622

California Central Railway Company.

Statement showing number of passengers in and out of Los Angeles for the year ending December 31, 1889:

Month	Number	Number
	forwarded	received
January	25,795	27,489
February	24,102	24,162
March	25,837	24,870
April	23,726	23,691
May	22,233	22,667
June	20,214	20,327
July	24,670	24,052
August	21,774	21,173
September	22,491	21,560
October	17,033	18,230
November	16,186	17,640
December	18,450	19,950
Total	262,580	269,113

Statement showing shipments of dried fruits, wines, liquors, honey, grain and wool by counties during the year 1889:

COMMODITIES IN POUNDS.	Los Angeles County	Orange County	San Bernardino County	San Diego County
Dried fruits	180,000	163,000	7,940,000	1,400,000
Wines and liquors	3,990,000	140,000	2,043,000	40,000
Honey	60,000	100,000	490,000	420,000
Grain	12,780,000	2,721,000	5,140,000	16,760,000
Wool	618,000	586,000	208,000	892,000
Total	17,518,000	3,706,000	15,846,000	19,092,000

Wells, Fargo & Co.'s Express. Through the courtesy of Mr. Butler, agent in this city, THE TIMES is furnished with the following recapitulation of express business transacted through the Los Angeles office:

No. pounds freight traffic, 1885	1,350,000
No. pounds freight traffic, 1886	3,279,845
No. pounds freight traffic, 1887	5,466,479
No. pounds freight traffic, 1888	6,325,011
No. pounds freight traffic, 1889	7,150,104
No. of men employed at Los Angeles, 1885	9
No. of men employed at Los Angeles, 1886	14
No. of men employed at Los Angeles, 1887	30
No. of men employed at Los Angeles, 1888	44
No. of men employed at Los Angeles, 1889	40
No. messengers en route, 1885	7
No. messengers en route, 1886	13
No. messengers en route, 1887	32
No. messengers en route, 1888	45
No. messengers en route, 1889	56
No. express trains daily, 1885	10
No. express trains daily, 1886	16
No. express trains daily, 1887	23
No. express trains daily, 1888	26
No. express trains daily, 1889	50
No. wagons in use, 1885	4
No. wagons in use, 1886	7
No. wagons in use, 1887	11
No. wagons in use, 1888	11
No. wagons in use, 1889	11

*December estimated.

Commerce.

The local office of the Pacific Coast Steamship Company furnishes the following statistics:

Freight landed at San Pedro, Dec. 1, '88, to Dec. 1, '89, lbs.	32,132,474
Freight landed at Redondo, July 1, '89, to Dec. 1, '89, lbs.	5,112,305
Freight taken from San Pedro, Dec. 1, '88, to Dec. 1, '89	13,781,293
Passengers landed at San Pedro, Dec. 1, '88, to Dec. 1, '89	5,529
Passengers landed at Redondo, July 1, '89, to Dec. 1, '89	400
Passengers taken from San Pedro, Dec. 1, '88, to Dec. 1, '89	9,581
Passenger steamers at San Pedro going north, Dec. 1, '88, to Dec. 1, '89, trips	184
Passenger steamers at San Pedro going south, Dec. 1, '88, to Dec. 1, '89, trips	91
Passenger steamers at Redondo, July 1, '89, to Dec. 1, '89, trips	31
Freight steamers at Redondo, July 1, '89, to Dec. 1, '89, trips	14
Freight at steamers at San Pedro, Dec. 1, '88, to Dec. 1, '89	49

TELEGRAPH.

The Western Union and the Postal Telegraph Company.

Within the past year a new wire has been constructed by this company from San Francisco to El Paso, Tex., and a new line has been extended from this city to Santa Monica. There are in Los Angeles the main office corner Main and Court streets, and nine branches. Statistics as to amount of business transacted are not available.

POSTAL TELEGRAPH COMPANY.

An office of this company has been established in Los Angeles within the past year under the superintendence of R. R. Haines, an old time telegraph manager. The company is enterprising and reliable and is reaching out for its share of business.

PACIFIC POSTAL TELEGRAPH-CABLE COMPANY.

The telegraph line of the company with the above long title is one of the acquisitions to this growing metropolis within the past year, and has been quite warmly welcomed by many people. The officers of the company are: J. W. Mackay, the well-known millionaire, president; M. G. Van Horne,

a prominent telegraph man, as vice-president; Charles R. Hosmer, another prominent telegrapher, as general manager, and L. M. Storrer, for many years cashier of the Western Union Company at San Francisco, as District Superintendent. The local management here is in the hands of R. R. Haines, with headquarters at 19 West First street. The company has a business capacity of six wires running from this city through the center of the State, connecting with all the principal business cities of Central and Northern California, Oregon, Washington and British Columbia, thence eastward by the Canadian Pacific Railroad, and connecting en route with the States of the great West by branch lines, and from Montreal with all of the commercial centers of the Central and Eastern States. A prominent feature in this company's programme is its special and immediate connection with the Commercial Cable Company (the Mackay-Bennett system) for all parts of the world enjoying telegraphic communications.

The Pacific Postal system covers two-thirds of the telegraph field of the country through alliances with eastern companies that have been enabled to survive the opposition of the Western Union, notably the American Rapid, the Bankers and Merchants', and the Commercial Telegraph Companies. At present the wires are being rapidly extended from Kansas City southerly and westerly, \$1,500,000 being the estimated cost of construction of lines now in hand, and which will reach the Pacific Coast, giving the company a second outlet for its business with the great East. A party is now in the field working eastward from this city, and will soon establish a wholesome competition in the telegraph business of the towns now making Los Angeles their commercial and social center.

Telephone.

The Telephone Exchange of Los Angeles was organized in 1882, with seven subscribers, and the patronage has steadily increased until there are now 1050 telephones in use in the city of Los Angeles, and some 150 more in the smaller towns of this county. Every town in the county is connected with this city by telephone. The annexed table shows the number of telephones in use in some of the principal cities of California:

San Francisco	2,500
Los Angeles	1,050
Oakland	500
Sacramento	300
San Jose	125
Pasadena	70

FEDERAL MATTERS.

REPORTS FROM VARIOUS GOVERNMENT OFFICES.

Military Department of Arizona—Internal Revenue—Postoffice—Soldiers' Home—Signal Service Report.

MILITARY matters command much attention in Los Angeles. Following are statistics obtained from Headquarters of the Department of Arizona:

The military division of the Pacific includes the departments of "The Columbia," "California" and "Arizona," with one general officer in command of each, and the necessary staff officers and clerical force at his headquarters, to administer the affairs of his department and keep the command supplied.

The President of the United States, recognizing in 1886 the natural advantages which Los Angeles, with its transportation facilities and varied industries, possessed as a great and growing commercial center, from which the troops stationed in the Southwest could be readily operated and economically supplied, added Southern California to the Department of Arizona, and established headquarters at Los Angeles. This change brought about to our city the commanding general, his staff officers and the necessary clerical force to conduct the military operations of the department; in all, about fifty people, many of whom have families.

The command of the Military Department of Arizona includes the Fourth, Sixth and Tenth cavalry regiments; and the Ninth, Tenth and Twenty-fourth regiments of infantry, aggregating 4000 men, stationed at the various forts within the limits of the department, which extends from Texas and the Indian Territory on the east, to the Pacific Ocean on the west; and from Colorado, Utah and Nevada on the north, to the boundary line separating the United States from Mexico on the south.

Many of the articles consumed by this command are advertised for, and

procured under contract in Los Angeles, necessitating disbursements there for transportation and supplies, including subsistence, clothing, fuel, forage, stationery, cavalry horses, draft animals, building and plumbing materials, hardware, machinery and miscellaneous articles, aggregating annually more than \$1,200,000, in addition to the amount required to pay the troops.

Col. B. H. Grierson, Brevet Major-General, is in command of the department. His personal staff consists of First Lieut. C. H. Grierson, Acting Aide-de-Camp; Second Lieut. J. A. Perry, Acting Aide-de-Camp.

The department staff is as follows: Maj. W. J. Volkmar, Adjutant-General's department, Assistant Adjutant General.

Lieut.-Col. R. H. Hall, Sixth Infantry, Acting Inspector General. Capt. H. K. Bailey, Acting Judge Advocate, and in charge of the engineer office.

Maj. A. S. Kimball, Quartermaster, Chief Quartermaster.

Capt. C. A. Booth, Assistant Quartermaster, Assistant to the Chief Quartermaster.

Capt. W. A. Elderkin, Commissary of Subsistence, Brevet Major, U.S.A., Chief Commissary of Subsistence.

Lieut.-Col. J. R. Smith, Surgeon, Brevet Colonel, U.S.A., Medical Director.

Maj. G. E. Glenn, Paymaster, Chief Paymaster.

First Lieut. T. J. Clay, Tenth Infantry, Inspector Small-arms Practice, and Acting Ordnance Officer.

The troops are stationed as follows: Fourth Cavalry, headquarters and Companies E and L at Fort Lowell, Ariz.; Companies A, F, I and M at Fort Huachuca, Ariz.; Companies C and H at Fort Bowie, Ariz.; Company D at Fort McDowell, Ariz.; Company G at San Carlos, Ariz.; Company K at Fort Verde, Ariz.

Sixth Cavalry, headquarters and Companies A, C, H, I and K at Fort Wingate, N. M.; Companies D and L at Fort Stanton, N. M.

Tenth Cavalry, headquarters and Companies A, B, H and I at Fort Apache, Ariz.; Companies C, F and G at Fort Grant, Ariz.; Companies I, L and M at Fort Bayard, N. M.; Company E at San Carlos, Ariz.; Company K at Fort Thomas, Ariz.

Ninth Infantry, headquarters and Companies B, C, F and I at Whipple Barracks, Ariz.; Company A at Fort Mojave, Ariz.; Company D at Fort McDowell, Ariz.; Company E at San Diego Barracks, Cal.; Company G at Fort Huachuca, Ariz.; Company H at Fort Verde, Ariz.; and Company K at Fort Wingate, N. M.

Tenth Infantry, headquarters and Companies D, F and I at Fort Marcy, N. M.; Company B at Fort Stanton, N. M.; Companies C and H at Fort Union, N. M.

Twenty-fourth Infantry, headquarters and Companies A, D and F at Fort Bryard, N. M.; Companies B, C, E and K at Fort Grant, N. M.; Companies G and H at San Carlos, Ariz.; and Company I at Fort Thomas, Ariz. Indian scouts are stationed as follows: Company A at San Carlos; Company B at Fort Wingate; Companies E and F at Fort Apache. Total number, 145.

NATIONAL GUARD.

What It Consists Of and How Organized.

The First Brigade N.C.G., with headquarters in Los Angeles, consists of 12 companies, distributed as follows: Three companies in Los Angeles, two in San Diego and one each in Ventura, Pasadena, Pomona, San Bernardino, Riverside, Anaheim and Santa Ana, Brig.-Gen. E. P. Johnson commanding, Lieut.-Col. L. S. Butler, A.A.G.; Lieut.-Col. W. S. Cochran, surgeon; Maj. C. C. Allen, inspector; Maj. E. L. Stern, ordnance officer; Maj. George H. Bonebrake, paymaster; Maj. A. W. Barrett, quartermaster; Maj. G. Wiley Wells, judge advocate; Maj. Cyrus Willard, engineer officer; Maj. H. M. Russell, inspector of rifle practice; Maj. M. T. Owen, signal officer; Maj. George M. Dannels, commissary, and Capt. H. Z. Osborne and A. C. Jones, aid-de-camps. There are two regiments of six companies each, the Seventh in Los Angeles, and the Ninth not yet mustered. The annual allowance to each company is about \$1750. This money goes to the companies direct, and is disbursed for rent of armories and other expenses.

The officers of the regiments consist of one colonel, lieutenant-colonel, major, adjutant, surgeon, quartermaster, commissary, inspector rifle practice, ordnance officer and chaplain each, and about 800 men.

The Signal Corps, under command of Maj. Owen, consists of 10 men from each regiment.

The brigade held its first encampment at Pacific Beach, near San Diego, in August last, the expenses of which were defrayed by the State. The Governor and Adj.-Gen. Orton were pres-

ent, and expressed much satisfaction at the general appearance of the brigade in general orders.

FOR THE VETERANS.

The Pacific Branch National Home for Disabled Soldiers.

The officers and non-commissioned officers are:

Governor, Col. Charles Treichel. Treasurer, Maj. Adolph Erdman. Surgeon, Maj. Herman E. Hasse.

Sergeant-Major, John C. Morris, late Company A, One Hundred and Eighty-first Ohio Infantry.

Quartermaster Sergeant, George B. Wise, late Acting Ensign, United States Navy.

Commissary Sergeant, William R. Roberts, late Company K, Twenty-eighth Illinois Infantry.

Dining-room Sergeant, William W. Owens, late Company C, Seventh California Infantry.

Sergeant of the Guard, John H. Rice, late United States Navy.

Chief Bugler, Alpha Oheks, late Company F, One Hundred and Forty-second Illinois Infantry.

Sergeant of a Company, J. N. Armstrong, late Company A, Gray's Battery.

Sergeant of B Company, Samuel B. McCall, late Company E, Third Iowa Infantry.

Sergeant of C Company, William B. Clothier, late Company E, Fourth California Infantry.

Sergeant of D Company, Madison W. Criss, late Company I, Eighty-eighth Indiana Infantry.

No members present, 414; members on furlough, 39.

This home is situated in Los Angeles county, about three miles from Santa Monica. It commands a magnificent view of the ocean in front, and of the mountains in the rear.

The first two barracks were not completed until the middle of March last, and before the end of that month they were fully occupied. Previous to that time nearly one hundred old soldiers were being cared for as well as circumstances would permit in a temporary building which had been hastily improvised for the purpose. By the end of June two more barracks were completed, and these also were soon filled.

These buildings are designed for 100 men each, but no old soldier has ever yet been turned away because the home was full, and they are now overcrowded.

The buildings thus far erected are: Four barracks, a temporary but ample and comfortable dining-room, a kitchen with all the latest and most approved appliances for cooking, and recently a bakery. Also a carpenter shop, paintshop, work rooms for tailor, saddler, shoemaker, tinmith, plumber, blacksmith, engineer, machinist, etc.

An ample supply of pure and wholesome water is assured. It is brought to the home in pipes from a spring in the cañon, a distance of over five miles. In connection with this work a service reservoir has been built with a capacity of 400,000 gallons. It is also the intention to build a storage reservoir to hold 200,000,000 gallons.

On the 30th of June last the general work of construction was necessarily suspended, no further appropriation for that purpose having been made by Congress. Some wants, however, which are considered absolutely indispensable, will be supplied without waiting for the next appropriation. A building for postoffice and store is almost completed. A library will be commenced immediately. The building for this purpose will be used for post and other society meetings, and also for religious services.

While members of the home are not required to work, they are encouraged to do so, and are given the preference in every case, provided they are physically and otherwise able. The rate of pay is uniform at all the National Homes, and is fixed by the Board of Managers. In the month of November there were 140 names on the pay rolls; of these all but 12 are members of the home.

The work thus far accomplished has necessarily been confined to providing those things which were actually necessary for the comfort and health of the members. Their amusement and pleasure will be the next consideration.

INTERNAL REVENUE.

Details of the Collections at the Los Angeles Office.

Guy B. Barham, deputy collector of internal revenue for the First District of California at Los Angeles, gives the following figures of transactions of his office from November 1, 1888, to November 1, 1889. This does not include penalties or amounts paid in settlement of seizures, which are remitted directly to the collector in San Francisco. These amounts do not cover immense quantities of brandy made here and shipped in bond to other dis-

tricts. These are therefore the local collections of Los Angeles:

Tax paid stamps sold.....	\$85,253 80
Beer stamps sold.....	12,057 28
Cigar stamps sold.....	7,732 38
Special tax stamps sold.....	22,518 58

Total.....\$117,562 00

The Government tax on spirits is 90 cents per gallon, which, calculating from the amount of tax-paid stamps above given, would make the local manufacture of spirits upon which tax was paid at this office 109,170 gallons. The principal part of the brandy manufactured here is sent away in bond.

The tax on beer is \$1 per barrel of 31 gallons, and the same calculation on beer stamps would show the local manufacture of beer to be 12,375 barrels or 883,074 gallons. This is by one firm, Maier & Zobelein.

The tax on cigars is 30 cents per 100, and the stamps sold show the local manufacture to be 2,584,100.

UNITED STATES LAND OFFICE.

Resume of the Business for the Year 1889.

United States Register Polk furnishes the following:

With this I beg to hand you a statement of the business transacted in this office during the current year, up to December 17, 1889, and from which it will be seen that the total number of acres sold was 161,444.50, and the amount of money received therefor, and also the other various accounts mentioned in the statement, was \$98,784.89.

This includes all the business that was transacted for the time mentioned from which the Government derived a revenue.

In addition to the above transactions, there were filed, during the year 1889, 388 affidavits of contest; 81 cases were heard in which both parties appeared, and 70 cases in which default was made and ex parte testimony taken. There were more than 100 decisions rendered, some of them in cases that had been heard during the previous year.

As will be seen from the foregoing, a great deal of the work of this office is on contest business, and, by reference to our docket, we find that there is a case set for every day to March 2, 1890. Very respectfully,

I. H. POLK.

Statement of business transacted in the United States Land Office at Los Angeles, Cal., during the year 1889:

	Acres	Amount
221 preemption entries.....	20,569 32	\$95,454 20
119 commuted homestead entries.....	16,278 30	27,755 98
30 excesses.....	648 07	887 57
24 sales timber land.....	2,541 63	5,568 82
21 sales mineral land.....	1,574 75	2,285 60
10 sales desert land.....	4,200 22	2,100 00
444 homestead entries.....	65,815 81	7,738 60
137 final homesteads.....	20,470 23	1,365 70
179 timber culture entries.....	21,407 82	2,206 00
52 preemption declarations.....		1,049 00
9 homestead declarations.....		27 00
19 mining applications.....		19 00
24 timber applications.....		240 00
Timber decreedations.....		60 00
3 coal land decreedations.....		0 00
3 military bounty land.....		
warrant locations.....		12 00
3 mining protests.....		20 00
16 state selections.....		56 00
8 railroad selections.....		75 00
reducing testimony to writing.....		815 93
Totals.....	161,444 50	\$98,784 89

I. H. POLK, Receiver.

THE POSTOFFICE.

Immense Business—Striking Increase Over 1883.

The receipts of the postoffice for 1889 amount to nearly \$20,000, being an exceptionally large increase over the previous year.

During the past year the office has received and dispatched over 550 sacks and pouches of mail daily, equal to 16,000 a month, and amounting to 192,000 sacks and pouches of mail received and dispatched during the year. Averaging each sack and pouch at 40 pounds the amount of mail handled would be equal to 8840 tons.

Upwards of \$1,000,000 has been handled in the money order branch.

Twenty-five thousand money orders and 9000 postal notes were issued and a much larger amount paid.

In the registry branch 16,122 letters and 3800 packages have been registered, and 21,248 registered letters and packages delivered.

Following is a comparative statement of deliveries by carriers of the Los Angeles postoffice for 1888 and 1889:

	Year ending, Nov. 30, '88.	Nov. 30, '89.
Registered letters.....	6,715	12,226
Letters.....	2,553 879	3,243,804
Postal cards.....	236,737	341,813
Newspapers, circulars, etc.....	1,837,063	2,194,370
Totals.....	4,644,394	5,792,279
Total pieces mail delivered by carrier year ending Nov. 30, 1889.....		5,792,279
Total pieces mail delivered by carrier, year ending Nov. 30, 1888.....		4,644,394
Total increase of pieces delivered.....		1,147,885

Collections by carriers of the Los Angeles postoffice:

	Year ending, Nov. 30, '88.	Nov. 30, '89.
Letters.....	2,663,760	3,399,967
Postal cards.....	414,483	622,841
Newspapers.....	232,438	273,957

Totals.....3,400,684 4,216,765

Total pieces mail collected, year ending Nov. 30, 1889.....4,216,765

Total pieces mail collected, year ending Nov. 30, 1888.....3,400,684

Total increase of pieces collected.....816,081

Total pieces of mail handled by carriers in 1889.....13,000,344

Total pieces of mail handled by carriers in 1888.....8,055,078

Total increase of pieces handled over 1888.....4,945,266

MARITIME.

Report from the Collector of the Port of Wilmington.

Report of the Port of Wilmington, Cal., for the year December 1, 1888, to December 1, 1889.

Arrivals:	
Steamers, number.....	478
Schooners, number.....	19
Sails, number.....	18
Barks, number.....	14
Barkentines, number.....	6
Brigs, number.....	3

Total.....619

Domestic tonnage, tons.....441,758

Foreign tonnage, tons.....47,747

Total.....489,505

Imports:

Lumber, feet.....48,024,000

Coal, tons.....53,015

Merchandise, tons.....20,690

Tea (railroad), tons.....902,550

Coke, tons.....260

Caustic soda, tons.....22

Live stock, head.....3,740

Exports—all domestic, no record.

Collections for year, \$58,060.23.

EDUCATIONAL.

CHURCH AND PRIVATE INSTITUTIONS OF LEARNING.

University of Southern California—St. Vincent's Los Angeles College—Harvard Academy—Baptist College, Etc.

LOS ANGELES has, in addition to the comprehensive system of public schools (referred to elsewhere), a number of educational institutions under church patronage and private, of which the people may well feel proud. They are here briefly described:

The following is a brief outline of the University of Southern California: Rev. M. M. Bovard, D.D., president. This institution is under the patronage of the Methodist Episcopal Church. It has several colleges already in operation, each largely endowed, and several others projected, endowments in part provided for.

Of the colleges of the University now in operation the following may be briefly mentioned:

College of Liberal Arts, located at University Plaza, West Los Angeles, Rev. F. B. Cherington, D.D., dean, supported by a large and efficient faculty. Two large, commodious and elegant buildings, free of debt, are occupied by it.

The College of Medicine, located on Aliso street, J. P. Widney, M.D., dean, aided by a large and finely-equipped faculty. The building is large and well adapted to the wants of the institution, and is free of debt.

College of Theology, located at San Fernando, Rev. R. S. Maclay, D.D., dean, aided by an able faculty. The building is a fine one, the gift, free of incumbrance, of Senator Charles Maclay, who also gave the large land endowment which supports the college.

College of Agriculture, located at Ontario, W. S. Randall, Dean, with a strong faculty. The building is large, well-arranged and free of debt.

The seminary at Escondido opened October 1st, with Prof. C. A. Weaver and Prof. J. A. Morrison in charge. The school occupies a fine, large building free of debt.

Each of these five colleges has a good attendance and is in a flourishing condition.

ST. VINCENT'S

Catholic College for Boys and Young Men.

This institution, located on Grand avenue and Washington street, is a boarding and day school for boys and young men.

It was founded in 1867, and received its charter in the year following. Its first site was on Sixth street. Now it is centrally located in the residence portion of the city, within easy access by street cars from any point, the new cable line passing the entrance on Grand avenue, and the Main-street line on Washington street, making it

convenient for day scholars from all parts of the city.

The buildings are large, its halls and dormitories lofty and spacious. The campus is extensive and furnishes abundant space for games and outdoor recreation. The institution is furnished with all modern conveniences, calculated to make the students feel at home and contented. Every effort is made to insure progress in studies. The system is simple, opposed to cramming the mind with useless or merely nominal branches.

The course is collegiate and commercial.

The collegiate course embraces English grammar, rhetoric, composition, history (ancient and modern), elocution, geography, arithmetic, algebra, geometry, trigonometry, surveying, differential and integral calculus, chemistry, natural philosophy, astronomy, logic and metaphysics, Latin and Greek. The Spanish, French and German languages are optional.

In the commercial course, besides the English language, arithmetic, geography and elocution, particular attention is given to commercial law and book-keeping in its various branches.

Students who have completed the collegiate course in a satisfactory manner are entitled to the degree of bachelor of arts; and, after spending two years in the pursuit of scientific or literary studies, they can receive the degree of master of arts.

Commercial diplomas are awarded to the students of the commercial department on the satisfactory completion of their course.

The college, though presided over by Catholic priests, opens its halls to all, without distinction of creed. Whilst students professing the Catholic religion are instructed in that faith and exhorted to live according to its dictates, the religious convictions of non-Catholic students are never interfered with. A most strict and watchful care is bestowed on the moral training of the students. No offense against morality, in word or deed, is tolerated; the use of liquors and tobacco is strictly forbidden; offenders in this respect are liable to be dismissed; obedience to rule and authority is strictly enforced. The officers of the present term are:

Very Rev. A. J. Meyer, C.M., president and professor of Latin and German.

Rev. M. Dyer, C.M., professor of logic and metaphysics and higher mathematics.

Rev. L. P. Laudy, C.M., professor of chemistry, physics, French and arithmetic.

Rev. J. J. Murray, C.M., professor of rhetoric, history, elocution and book-keeping.

Rev. J. E. A. Linn, C.M., professor of mathematics, Latin and English.

Rev. H. I. Dockery, C.M., professor of commercial law, banking, arithmetic, stenography and Spanish.

Rev. M. J. Brennan, C.M., professor of mathematics, Latin, Greek and English branches.

F. McNeil, C.M., professor of Latin and Greek.

J. Murphy is in charge of the primary class.

Prof. T. Wilds teaches piano and organ.

Prof. J. Gardner teaches the violin and other string instruments.

LOS ANGELES COLLEGE.

A Seminary for Girls and Young Ladies.

The preliminary steps for the organization of a Christian school in this city, for the higher education of girls and young women, were taken in June, 1885. It was the design of the organizers to establish such a college as would afford for the Southern Pacific Coast a course of instruction for young women equal to that of the leading colleges in the East.

The institution was made non-sectarian, though preëminently Christian. It is under the control of a board of trustees, elected without regard to church connection. The college was chartered under the laws of the State of California, with full power to confer degrees, and it was formally opened on the second day of September, 1885, in a building erected for its temporary accommodation, near the corner of Fifth and Olive streets.

The growth of the school was rapid, and though many additions were made to the buildings, it was soon found that they could not be arranged so as to accommodate the numbers applying for admission. It was therefore necessary that a more commodious structure should be erected. Stock was subscribed by a number of our citizens, and the present location, corner Eighth and Hope streets, was selected.

During the fall and winter of 1887 and 1888 a building 90 feet by 140 feet, was erected, costing over \$60,000.

It is in the form of a hollow square. The court is 45 by 70 feet. Two large skylights, containing over 800 feet of glass, flood it with light and sunshine. It forms a delightful place for exercise,

for the regular gymnastic drills, and for the musical and literary entertainments.

Around the court and opening into it are the assembly-room, recitation-rooms and school halls. These are large and airy, and are adapted in every way to the purpose for which they are used.

The bedrooms are 22 feet long by 12 feet wide.

The building is heated by steam, with a radiator in each room, and is lighted throughout by the Edison incandescent electric light.

Complete philosophical apparatus enables instructors to give all the experiments usual in the study of physics. The study of physiology is pursued with the aid of a skeleton, manikin, and dissection of the different organs of the lower animals.

A chemical laboratory enables the pupil to master the study of chemistry by the aid of practical experiments.

When practicable the classes are taken to visit and see for themselves the application of the principles of science in the manufacture of things of daily life.

There are 302 pupils in attendance.

The faculty is as follows: Rev. D. W. Hanna, A.M., president, mental and natural sciences; Alice M. Broadwell, lady principal, history; Christine Moodie, literature and rhetoric; Mary C. Noyes, A.M., mathematics; Amy Saxton, assistant mathematics; Mary A. Roe, zoölogy and geology; Rev. J. C. Nevin, botany; Linda Carver, principal preparatory department; Laura Moore, primary department; Lucy S. Hanna, secretary. Department of elocution, Kate Seaver Downs; W. Havemann, Latin; Rev. Charles Bransby, Spanish; Prof. A. H. Dietz, French; Herr Arnold Kutner, German; Adolph Willhartz, piano, organ, theory and harmony; Bertha Butler, voice; H. R. Hamilton, violin; C. S. DeLano, guitar; Miss A. Werner, mandolin. Art department, Mrs. C. F. Merrill; Alice M. Broadwell, director of gymnasium; Martha Stewart, matron.

Harvard Military Academy.

On the 19th of March, 1888, Harvard School was established, and opened to students by Profs. N. W. Murch and H. L. Lunt.

It was designed to provide thorough and careful instruction in English, science and the classics—fitting its students either for college or business. The character of the school and the quality of instruction soon won for the institution a goodly number of students, which steadily increased till it became necessary to procure more commodious and convenient quarters. Fortunately in this emergency the St. Vincent College building, used as the United States Army headquarters, was soon to be vacated, and a lease was obtained of this building, which adequately supplies the wants of the school.

The college building is located on the corner of Sixth and Hill streets, directly opposite the postoffice. It is accessible by street cars from all parts of the city. The grounds comprise two and one-half acres of lawn admirably adapted for drills, lawn tennis, croquet, base-ball and other outdoor sports.

At this juncture it was deemed advisable to change in some respect the character of the school by introducing military drill and discipline, and by opening a department of elocution and oratory. This necessitated, also, a change of name for the school, which is now known as the Harvard Military Academy.

There are over 125 students in attendance. The instructors are: N. W. Murch (graduate of Phillips, Andover, Mass.), mathematics and science; H. L. Lunt, A.B. (graduate of Bowdoin College, Maine), Greek, Latin, English, book-keeping; W. Havemann, A.M. (graduate of Göttingen, Germany), ancient and modern languages; Godfrey Birdsall (of West Point), mathematics and military tactics; H. B. Small, assistant in English.

Los Angeles University.

This institution is under the patronage of the Baptist Church. The buildings, which cost about \$35,000, are located in a campus of 16 acres, just outside the city limits in the west. The buildings occupy a commanding view of the Sierra Madre range on the north, and of the Pacific Ocean on the west.

The college property is free from debt. One hundred and eight pupils were enrolled last year.

The faculty is as follows: Rev. J. H. Reider, president, intellectual and moral philosophy; Rev. H. C. Bristol, A.B., Greek, higher mathematics, book-keeping and commercial law; Miss Jennie Pomerene, A.B., Latin and German literature; Rev. T. N. Lord, chemistry, physics, rhetoric and physiology; Miss Emma Bennett, A.B., French, English literature and calisthenics; Mrs. Emma B. Reider, mathematics and United States history;

Vines (gallons), 485,990.....	71,490
Wheat.....	50,760
Barley.....	35,290
Corn.....	17,460
Hay.....	17,040

A. H. Denker, who has taken a commendable interest in this subject, informs us that the grain crop of 1889 was about 125,000 acres, and that for the coming year as much as that has been already planted, with a prospect that the aggregate will exceed it by 100,000 acres. Mr. Denker puts the area of the county at 8,000,000 acres, of which 2,000,000 are arable land, and he thinks that the future great industry of this county is beet sugar.

FRUIT-GROWING.

Citrus-fruit Culture and the Situation in Southern California.

Slightly paraphrasing the "Song of the Brook" in Tennyson's exquisite dyl, well may Southern California sing,

Booms may come and booms may go,
But I go on forever.

for in her winterless clime, her cerulean skies and her balmy atmosphere is the "Elixir of Life" and the "Fountain of Youth," which old Ponce de Leon vainly sought amid the malarial everglades of Florida; and in her generous and fruitful soil a promise and a guarantee to the present and future generations of independence, prosperity and grandeur, of which the denizens of less favored regions of earth have never dreamed, and which we, her favored sons and daughters, as yet fail fully to appreciate.

But granting that God's primeval curse clings to us even in this "western Eden," and that the "sweating" process must forever go on, let us look only on the "bread and butter" side of the question, and, judging of the future by the past and present, endeavor to formulate a true and proper augury of the horticultural situation as it now is, and promises to be.

In the good old days of Don Benito, Wilson and William Wolfskill, and even later, the scalebugs of various sizes, colors and names unpronounceable came to molest and make us afraid. An orange and lemon orchard was a veritable gold mine to the fortunate possessor, and the little "persimmon" that was requisite in their care and cultivation was all done by a few Indian and Mexican laborers. Then followed Mr. S. J. Rose and others with large plantings, and about the year 1870 a regular citrus "boom" set in, and everybody able to procure one thousand, one hundred or one dozen trees set them out, and sat down to dream of golden fruits and golden profits; and well was their faith justified until the advent of the terrible scale pests, white and red, a few years later. More especially the *icerya purshii* or cottony cushion scale, with its loathsome and irresistible advance, spread terror and destruction everywhere. It is needless to relate the determined and costly fight made by most of our orchardists to stay its destructive progress, all without avail. It threatened the destruction of every other tree, shrub and lower, as well as the citrus family. Then came a vague rumor that in Australia and New Zealand there was in existence some unknown parasite that could successfully cope with and annihilate the terrible scourge, and Mr. Albert Koeble of the Entomological Division was sent to investigate. It is said that but for the energetic assistance rendered by Mr. F. McCoppin, United States Commissioner to the Melbourne Exposition, who took the responsibility of advancing the funds necessary, the mission would have been a failure. To the Messrs. Spreckels, also, of the Oceanic Steamship Company, who generously took charge of and transported, free of cost, the various consignments on the long voyage through the tropics, the most heartfelt thanks and gratitude of our entire community are due. The first three consignments were received by Prof. Coquillette in December, 1888, and January, 1889, altogether about 130 of the vedolia cardinals or Australian lady-bug, and they were at once placed in tents encircling trees infested with the cottony cushion scale upon the premises of Mr. Joseph W. Wolfskill, on Alameda street, Los Angeles, and to the faith, energy and public spirit of that gentleman, ably and zealously seconded by the efforts of Prof. Alexander Craw and D. W. Coquillette, is more largely due than to any others the credit of distributing as rapidly and widely as possible this most invaluable parasite ever discovered, the savior of the homes of Southern California. During February also, Col. Dobbins and Mr. Chapman of San Gabriel received from Prof. Coquillette consignments of the vedolia, who, later in the season, distributed many colonies among surrounding orchards. In June the Los Angeles County Horticultural Commission, having been

created, decided to establish a propagating station at the orchard of Mr. William Niles, on Washington street, and several large orange trees were inclosed with canvas houses and large numbers of the vedolia in the pupae and larva stages were procured and placed therein. Several hundred colonies were distributed free to the citizens of this county and a good many sent, on application, to Santa Barbara, Fresno, San Mateo and Contra Costa. It is estimated that at least 40,000 vedolias were distributed from this station alone. The effect was magical. Before the 1st of October the countless myriads of icerya had been annihilated, and only the empty filaments, like ghostly shrouds, were left in all the land to tell that they had ever been. Then almost as sudden as a meteor's flash vanished the vedolia. It was feared by many that they would all be lost, and steps were taken by the commission to preserve a few, if possible, in tents during the winter. As had been anticipated, the white scale in many places began to make its reappearance, probably the eggs having been hidden in the sand and soil beneath the trees, and thus escaped the search of the ravenous vedolia. But almost simultaneously reappeared the beneficent parasite, and now they may be found in almost every orchard, "attending strictly to business," and the question of the "survival of the fittest" may be considered solved.

The red scale is now the only formidable enemy to citrus fruit culture in Southern California, and it is confidently believed it will be soon under control, if not absolutely annihilated. Although no effective parasite corresponding to the vedolia for the cottony cushion has yet been discovered, it is believed one will be, and in the mean time good results are being obtained by cutting back and spraying with various emulsions, especially some of the new, cheap and simple resin washes. Best of all, it is just at this writing absolutely demonstrated that the fumigation of trees with hydrocyanic acid gas under proper conditions will destroy almost every living red, black and other scale or insect pest, and that at an expense of but from 20 to 40 cents per tree, according to size, one application being necessary only every two or three years. There is not a full-grown orange tree in Southern California that if restored to health and vigor will bear less than from five to ten boxes of fruit, and that means \$5 to \$10 per tree—from \$350 to \$700 per acre. Any horticulturist not willing to expend \$50 per acre, if necessary, per annum in fertilizing and keeping down insect pests, should at once dig up his trees and raise barley or peanuts instead. There is not the slightest doubt that the gas treatment applied to deciduous trees infested with the San José scale will prove equally efficacious. So we may now consider the terrible insect pest question settled, and proceed to plant new orchards with the fullest confidence that we can enjoy the fruits thereof. The day is dawning, the clouds of darkness and doubt rolling away. What is the promise of the future?

Probably a reasonably correct approximate estimate of the whole number of citrus trees now in orchard in the State (mostly Southern California) is about 3,000,000, or, in acres, a little less than 43,000. It is safe to assume that the number and area will be more than doubled within the next ensuing three or four years, and that in the year 1900 there will be in nearly full bearing 100,000 acres—7,000,000 trees—producing at least 25,000,000 boxes of oranges and lemons, or about 75,000 carloads. To move this immense amount of freight in 150 days (five months) would require 50 daily trains of 10 cars each. Probably before that time railroad transportation will be so cheapened that \$75 per carload to the different centers of population of the United States may be assumed as a fair estimate. "Is there not great danger of over-production and a consequent glut of the markets?" it may be asked. Not the slightest. In the year 1900, east of the Rocky Mountains, and including Canada, which we shall supply, there will be considerably more than 100,000,000 of inhabitants, giving less than one-quarter box to each person, and several millions of people west of the divide still unsupplied. In the year 1900 we shall be able to deliver our citrus fruits at all the eastern centers at \$1 or \$1.10 per box, and then they will want more than we can send them, and our orchards will continue to be worth \$1000 per acre and upward. They will want all the walnuts, prunes, peas, peaches, apricots and figs that we can send them at reasonable prices and of good quality.

Moral: Plant any or all of these trees if you have suitable soils and locations and can take good care of them. Don't be afraid of insect pests, but fight them and conquer; don't be afraid of over-production; don't be afraid of the future!

ALBERT F. KERCHEVAL.
Los Angeles, Dec. 15, 1889.

MINES AND MINING.

THE COUNTRY RICH IN USEFUL EARTH DEPOSITS.

A General View of the Subject—Valuable Minerals Lying Dormant—Fundamental Principles Discussed.

THE interest in all that tends to promote the development and utilization of visible resources, now lying dormant around us, still (with unimportant exceptions) lacks proper appreciation, and little progress is being made toward their preparation and manufacture. If some seemingly commonplace thing is required, may be, but a little chalk, a drug store is sought, the purchase is made, but who stops to make inquiry where the article came from. We might unthinkingly say it is a small affair and not worth our while to give it thought. Despire small things and fail to aggregate them, and we neglect the grasping of the possible importance that is in them as a multitude, and that astonishes us when we begin to figure their variety and quantity, and our daily requirement of them in the affairs and wants of life. Suppose as a matter of curiosity an enumeration of some of these small things be made, such as the chalk, as an illustration. Its uses are many, and in order to demonstrate intelligently, not alone its especial importance—for it is small—but by analogy it leads to the consideration of other small things in great numbers, and, as a list, turns out to be formidable.

Its uses are for face powders, silverware polishing, drugs, chalk-lines in carpentering, for calcimining walls, and many other uses. One pound to each inhabitant per year would likely be a very conservative estimate. For 100,000 inhabitants, at an average of 5 cents a pound, would be \$5000 per year. Plumbago for stove polish, electrotypes facings and other uses, say for the same population at only three ounces to each inhabitant, would be 18,750 pounds, which at 15 cents would be \$2,812.50. Baskets of all kinds, say only one to every 10 persons, at 30 cents each, \$3000. Bottles, large and small, tumblers and ordinary glassware, at \$1 per year only, for each inhabitant, \$100,000. Plates, cups and saucers, pitchers, etc., for a family of five persons, say 20,000 families, at \$5 per annum each is \$100,000. Writing inks, say 5000 large bottles, averaging 50 cents each, \$2500, small, 10,000 at 10 cents, \$1000.

How quickly these figures run up to colossal proportions! Only a commencement has been made and we have \$214,312 per year for articles that could be manufactured here, and still the sum named is only a very small portion of a vast aggregate.

It may be said we have no raw materials about us to make these articles! Let us see: There is a deposit of the finest natural chalk near Oro Grande that is so pure and smooth that it is fit for face powder, even without treatment. Of plumbago there are several large deposits of suitable quality. Willocks of the kind used in basket-making can be grown here in any quantity desired. Sand of a quality pronounced by experts to be ample for most of the arts of glass-making is plentiful. Kaolin of unusual purity and very white, for making white table queensware, comes to my laboratory frequently from points not far from this city. So it is with most of the raw material needed to produce many of the wares and things used by us in our daily affairs. If some manufacturer would produce a number of articles instead of one, say quite a variety of small things, as a whole they would cover a larger field and enable such works to prove profitable by reason of variety.

For instance, suppose a small works started on a variety of materials of a somewhat kindred nature, i.e.: Chalk prepared for various uses; plumbago, stove polish, etc.; blacking for boots and shoes; French chalk for tailors' and shoe dealers' uses; plaster of paris (gypsum) for gas chandelier center pieces, wall finishing, etc. Here is a group of materials that could be combined under one roof and a good deal of the machinery plant would handle at least three of the products without separate appliances. While, maybe, any one of these articles, except the plaster of paris, would not pay as separate productions, there is no question but what combined as a whole, they would be highly remunerative.

During the last year some attempts have been made to produce a marketable hydraulic cement, but the product has not been satisfactory. Materials, so far as analysis proved, of a proper

quality, somewhat widespread over several adjacent counties, were used in these trials. Most of the experiments made were based on the products of one locality or deposit by blending lime, silicates, alumina and magnesia, in supposedly proper percentages. Some very good appearing cements were produced, setting under water, but in the course of a few days or weeks the set came out, and disintegration followed.

Whether these failures were the result of lack of practical knowledge or not on the part of the experimenters, or improper materials being used would be difficult to determine.

A cement will likely be successfully made here without doubt, but not, probably, from materials all coming from the same place or deposit. It seems to be well settled that the proper grade of stone will have to be taken from several localities, producing thereby a blending that would reduce to a quality desirable.

SMELTING WORKS.

Considerable talk has been indulged in relative to establishing smelting works at or near this city, in case of the construction of the Southern Utah Railway, with a connection to our tide-water. That railway line would traverse a great mineral field, and sufficient in extent to justify a reduction plant here.

There are features, however, in connection with this subject that it would be well to consider.

If, as has been stated, great coking, coal and iron measures are to be tapped by this road, would not extensive works likely result at the mines for utilizing the iron and coal, and would not reduction works to cover the ores carrying gold, silver, lead, copper, etc., naturally cluster there, and would it not also be natural for a railroad company to foster and encourage them at that point, instead of allowing these products to come here, where at least two roads would seek to divide the transportation of products to eastern markets? Whereas, by the other course, they would virtually monopolize coal, coke, iron, and every kindred industry, including transportation.

The Pueblo (Colo.) works reach out almost to our doors in their grasp for precious metal ores, having a freight rate covering some 1500 miles, at \$9 per ton. Under ordinary circumstances, we could at least hope to control transportation at a living rate on ores over the Southern Pacific and Santa Fé railways; but the Utah project would again frustrate that possibility by controlling the fuel we would absolutely need for a successful solution of the question.

Local efforts are being made to manufacture plaster of paris for use here. The trouble has been to find a sufficiently pure gypsum of uniform white color and quality. Many deposits have been prospected and analyzed, but most of them carried either silicates or iron in too great percentages to answer. A number of mines, however, are available, and it is confidently expected that a good, marketable article will soon be produced. Orchardists and agriculturists will soon find use for ground plaster also for regulating soils.

MINING.

for the precious ores of gold and silver has been more brisk during the last few months than for several years. Capitalists of this city are shy of mining ventures, and a property that would command respect must be meritorious beyond question. Most prospectors do a little work on a find, generally consisting of a hole a few feet in depth, and, if an assay shows the ore to yield a paying amount, jump to the conclusion that they have "struck it rich," and have a mine. As a rule, they pull up stakes and start for some city or town to sell their find. In the majority of cases they fail to enlist any capital, for the reason that not enough work has been done to prove that they own even a reasonable prospect.

When this hardy, and, as a rule, hard-working class, realize that no one will pay anything for a little hole in the ground, it will be better for them. If the miner of this class will do more work and assure himself that he has a likely prospect, by development work, he can sooner impress the man of capital to help him out and appreciate honest effort. In mining matters, capital rightly directed, by brainy men, can bring us at least a share of the good things that may be unearthed within a reasonable radius of this city. Money must be forthcoming to so direct and so influence the management of mines tributary to our city, as to bring the bars of bullion to our credit. If we are farsighted and alertly cover grand opportunities in time and before others more enterprising cover the ground, vast commercial scope can be subserved and turned to our use and benefit.

EXCHANGE.

of the grain, fruit, wines, and products of our fields and manufactories

must be brought about with the miners. We should reach out, especially to Arizona, that land of sunshine, gold and silver. A Territory that, without doubt, has richer and more varied mineral resources than any other equal area, as a whole, on this globe.

Los Angeles can be made, as it is, the natural trading point for this territory, but it will be lost to us if we fail to use well-directed endeavors to control it.

Already eastern tradesmen, eager and farsighted, are making successful efforts to cover this rich field. They put their money back of their efforts. They invest in good mines, in cattle ranches, water canals and lands, railroads and town property, and in time will reap a reward that would be ours were we farsighted and wise.

TALK AND ACTION.

Our fair city has a commanding advantage, and can conquer the world around her, but it means work and capital turned in proper directions and managed with skill and reasonable foresight.

Our citizens organize strong bodies of business men, made up on principles of power, influence and good qualities, but they figure too near home and linger over the ashes of a spent boom, and wait for a rise in corner lots, without a resort to heroic, widespread and reaching practicable enterprises.

Good resolutions, on paper, sound all right, but they fail by repetition to heartily command attention, as they cannot bring about desired practical results.

Of one thing, our business men can rest assured, and that is: No manufacturer can see their way clear or depend upon uniform results without cheaper steam-making fuel. It would pay to combine and purchase a coal property north and the ships to transport it to this city, today, and dispose of the fuel at cost to consumers on a cooperative basis. Men who combine for their own protection will succeed, whereas an individual would be powerless alone. This one vital drawback is costing this community untold millions in drainage of money needed at home. We transport great vans of goods and wares from abroad, simply because there is a lack of appreciation and effort to produce them here. Begin at the right end of things and the remedy applies naturally.

We cannot hope to quickly accomplish this and bring about these changes, but a beginning can and should be made. Good times are wanted. Bring about self-sustaining measures of a nature that is not all consumers and no producers.

Nature has done her share for us. Witness our natural and as yet untouched resources, scattered with a lavish hand about us.

Wealth in our fields, in the mountains and hills. Our proximity to the ocean, the free highway of the world; our climate; the scenic beauty that surrounds us, and multitudes of almost unseen and unappreciated blessings about us on every hand, should stimulate us to something grander and nobler than mere idleness and speculation.

JOHN P. CULVER,
Civil and Hydraulic Engineer.

OUR MINERAL RESOURCES.

A Particular Mention of Southern Mines and Mining Districts.

The mineral resources of Southern California are both extensive and varied. Besides the precious metals, we have large deposits of copper veins and deposits of lead; mountains of iron and salt; and veins of coal and tin; lakes and deposits of mineral salts; building material, clay, plumbago, hydraulic lime and limestone, marble, gypsum, etc.

This extremely diversified mineral wealth is scattered throughout the southern counties, and affords lucrative employment for a very large number of men.

Besides the minerals, we have several petroleum basins, of which that near Newhall and the Puente basin are the most valuable and productive at present.

Before referring to the precious metal industry, some reference will be made to the various other economic deposits of minerals in this end of the State.

IRON.

In the Sierra Madre Mountains, near the cañon of the Tejuca, are large veins of iron ore, which must some day be utilized. These ore bodies are situated in the midst of an immense forest of fine pine timber, and if the ores are not smelted on the spot with charcoal made from the timber, a railroad will be built to recover both.

In San Bernardino county, about 16 miles from Daggett, is a veritable mountain of iron ore of splendid quality, and though at present of little value, it cannot always remain so.

In San Diego county, also, are large

deposits of iron ore, all of which will attract attention in time.

COAL.

Our coal mines are not as extensive as we should like to have them, but good coal is being mined near Elsinore, which is finding its way to the market and meeting with favor. There are also veins of coal near Riverside, but nothing of note is being done on the property at present.

COPPER.

No copper is being mined in Southern California, at present, though there are copper-bearing veins of great prospective value in San Bernardino county, in what is known as the Ord district.

A lead of quartz, carrying considerable sulphide copper ore, has been discovered near Wilson's Peak, in Los Angeles county, but it must be rendered more easily accessible before it has any value.

There are numerous veins and deposits of copper elsewhere in this part of the State, but the present low price of copper does not admit of their being worked profitably.

GRAPHITE.

A deposit of graphite, or plumbago (black lead), has been found near Crescenta Cañada, but little has been done to develop it. Graphite is not an uncommon mineral, but it must be very pure and occur in large quantity to have any value.

LEAD.

Lead is a metal much in demand in this part of California, and while there is an abundance of lead ore scattered about the southern counties, the most of it is situated too far from the various lines of railway to be of much value.

About 23 miles from Newhall, on the Santa Barbara branch of the Southern Pacific, in Castee Cañon, a mine is being developed which carries a large amount of lead ore. The ore also assays quite well in silver. It is quite possible this mine, called the Silver Mountain, may be equipped with a smelting furnace the coming year.

All about Oro Grande are deposits of lead ore which promise to make quite a large output. The mountains near Barstow also contain lead deposits. In fact, the amount of lead ore in that part of San Bernardino county is so large that a smelting plant is talked of at Oro Grande.

The Hesting Springs and Panamint mines also contain large quantities of lead, but these ores will not become available until more convenient transportation than 100 miles of freighting across the desert is afforded.

TIN.

The tin mines of the Temescal, though undoubtedly of some prospective value, are not being worked beyond the necessary assessment.

GYPSEUM.

During the past few months gypsum has been in demand, and the prospect is that a company will soon commence manufacturing plaster of paris and fertilizer from the deposits near Acton.

There are quite a number of gypsum beds of greater or less value in Los Angeles county, and it would seem that each of them might be made valuable if they were in the proper hands.

SALT.

Salt is obtained at quite a number of places in this part of the world. A large amount is manufactured at the seashore at Redondo Beach and elsewhere, but the larger amount is taken from lake beds and artificially evaporating saline waters from artesian wells. There is a large concern manufacturing salt on the line of the Southern Pacific road in the Colorado Desert, near Volcano Springs.

On the Mojave Desert, a few miles from Hesting Springs, is a good-sized hill of salt, and it is reported that near the Colorado River below Yuma there is a veritable mountain of this valuable product.

BORAX.

This mineral is mined quite extensively in San Bernardino county, both from lake beds and from a vein in the Calico Mountains. The annual product aggregates a large sum.

BUILDING MATERIAL.

The number of places where building stone and lime may be found is so large that it would require too much space to give them in detail. Suffice it to say that every county in Southern California has quarries of sandstone, lava rocks, lime, marble and excellent granite that cannot be surpassed by any imported article of the sort.

PRECIOUS METALS.

Southern California is the natural treasure-house of untold millions of golden and silver wealth. Almost every range has more or less good mines, and nearly every hill on the desert is the repository of hidden treasure.

Brief mention is made of the most

promising districts, the field being too broad and the space too limited to deal to any extent with individual properties.

SILVER REEF.

One of the most remarkable mineral districts in the world is that known as Silver Reef, in the Black Hawk mining district, in San Bernardino county. The reef was discovered in May, 1888, by Pasadena parties, who staked out and have since developed a number of claims. Geologically the formation has but few counterparts, being an immense bed of calcareous and silicious material, evidently a deposit from hot springs. The formation is about 100 feet in thickness, and has been developed to nearly this depth by shafts.

The ore occurs in zones or bands of mineralized calc-spar, and is chiefly chloride and chloro-bromide of silver, running from 30 ounces up into the hundreds of dollars per ton. This camp is one of unusual promise to the small investor, as high-grade rock can be shipped at comparatively small expense to Oro Grande and elsewhere. The present outlook for Silver Reef is most flattering, as abundant capital is being interested, and within the coming year considerable shipments are anticipated.

ORO GRANDE.

A small town on the California Central, is rapidly assuming airs of importance. The discovery of what appear to be large and valuable mines in the vicinity of the town have given a decided impetus to business of all kinds. Oro Grande seems to be the center of quite an extensive mineral district. To the west of the town are the now quite famous Clinker and General claims. These produce chiefly lead and silver ores, and promise to become large producers. They are owned by a syndicate of Los Angeles gentlemen.

Quite near Oro Grande, on the east side of the railroad, is a lime quarry, where limerock has been broken for some time for burning in kilns near the railroad. During the past year a man named Collins discovered silver bearing carbonate of lead and galena in the lime quarry, and the property is now being developed as a mining claim.

The Adams Bros.' gold mine, about 12 miles east of Oro Grande, has already earned quite a local reputation as a producer of pay rock. The ore is base, but carries about \$80 per ton. There is considerable talk about building a smelter at Oro Grande to treat the ores of the district.

ACTON.

The gold district of Los Angeles county is Acton, located about 55 miles from Los Angeles on the line of the Southern Pacific Railroad. There are several producing gold mines in this camp, the most prominent of which are the Red Rover and the New York mines. Both of these properties are equipped with mills and are grinding out the yellow metal, shipping about \$10,000 monthly.

On Mt. Gleason, eight miles southwest of Acton, some very promising gold prospects are being developed and machinery put in to thoroughly test the property.

THE SAN GABRIEL CANON.

The silver mines in San Gabriel Cañon have been attracting considerable attention lately by reason of the discovery of silver ore of extremely high grade.

The prominent mines of the group are the Kelsey and Mint and the New Year's Gift. The former claims were owned by a Los Angeles and eastern syndicate, which recently bought the latter claims from Messrs. Cullen and Miller. The "O. K." located south of the Kelsey, is also a promising property, and has considerable development. The ore is chiefly native silver and silver glance, with some chloride in a gangue of heavy spar.

The Victoria mines, owned by an English company, are opening the old Zapata and Winston mines, and have recently built a very complete 10-stamp silver mill. The ore is also of good grade, and the property has the appearance of becoming a bonanza, at least so the company claims.

At Glendora a strike was recently made on the hills back of the town, which may develop something valuable. A mill is being constructed in a cañon near town, and the owners of the property are showing their faith by their works. The result of this expenditure of capital, in machinery and development is looked forward to with great interest.

NEWHALL PLACERS.

During the year the placer mines in the vicinity of Newhall, in Los Angeles county, have been worked with renewed vigor. The principal work has been in Placerita Cañon, where hydraulic machinery has been in operation for several months; but it being found that the pumps and engines were inadequate, they are about to be replaced with a heavier plant, and during the coming year it is expected

that considerable gold will be the outcome of these improvements.

A number of Mexicans and "coyote-hole" prospectors are taking out gold from almost every gulch in this region about Newhall, including Dead Man or Los Murtes Dry Cañon, Soledad and the San Francisquito. Though the amount of gold taken out by any one of these prospectors is not large, in the aggregate the result of their combined labors makes quite a large sum annually.

The placer mines in the San Gabriel Cañon also have produced a considerable amount of gold during the year. A more systematic method of operations would doubtless result in opening valuable alluvial deposits. It will be necessary to control the water and to operate the mines in a manner which will produce the best results.

In Holcomb Valley some placer gold has been mined during the year, but the lack of a dumping-ground is a drawback to these mines, which will forever preclude any extensive operations there without an expenditure of a large amount of money.

Placer mines are scattered here and there about Southern California, but it is preëminently a region of leads and not placer mines. There is one famous locality in San Diego county, in the Cargo Muchacho Mountains, in Pipindero Flats, where gold nuggets were picked up on the surface of the ground, but these placers have joined the boom; they no longer exist.

CALICO DISTRICT.

The Calico Mountains, located in San Bernardino county, produce the largest amount of silver of any mining district in the State, at present.

Much has been said and written of Calico, but much evidently still remains to be learned concerning the nature and extent of the ore deposits of the district. Calico is a camp which has always stood on its own merits, paying its way from the outset, and until the mines were opened and had produced millions in silver but little outside capital was interested. The developments of the past year have been of a very gratifying nature to the miners, as the mines show a richness and permanency which it was formerly believed were not among the possibilities.

The extensive ore chambers opened in the Waterloo, the Occidental and Oriental have opened the eyes of the world to the fact that Calico has bonanzas, and big ones, too.

The output of the district, as nearly as could be learned, has been for the 12 months past about \$1,100,000. This estimate includes all the output of the companies and chloriders. There are operating on Calico ores four stamp mills, having a total of 115 stamps, with a crushing capacity of 350 tons every 24 hours. The ore is a free milling chloride of silver in a gangue of porphyritic rock, which is usually quite soft and crushes rapidly.

The mills of the Waterloo Company are at Daggett, about six miles distant from the mines. A narrow-gauge railroad connects the mines with the mills. The cost of transportation, it is stated, is but 12 cents per ton.

Calico has still a bright future and will produce many more millions before the camp is declared "petered."

Despite the encouraging results of "deep mining," in Calico, none of the mine-owners have had the courage to test their property beyond 300 or 400 feet. In most mining camps a property is scarcely considered opened until this depth has been attained, at least. Should a deep shaft (1000 feet or even 2000 feet) be sunk, it is quite likely the deposits will be found to continue to that depth, and it is possible that water may be encountered (the mines are now perfectly dry); and, while this would necessitate pumping, it would afford enough water, in all probability, to operate a large number of stamps.

When the mines of Calico are opened in this way they will have an assured permanency and value which can never come as long as the present "hand-to-mouth" system is engaged in. The mines are exploited in a manner which is calculated to convey the impression that they have no future, when every indication points to large and valuable deposits in depth.

IN THE DESERT.

There are hundreds, even thousands of claims scattered throughout the mountains of both the Mojave and Colorado deserts, many of which are never heard of through the columns of the papers, but many of which possess real value, and only require capital to make them productive; while others await the coming of a railroad to make them profitable. All along the line of the Atlantic and Pacific and the Southern Pacific railroads are mountain ranges, in almost every one of which are valuable deposits of precious metals.

Some of the prominent districts on the Atlantic and Pacific are the Victor, Barstow, Kramer, Harper, Ludlow, Lovie, Amboy, Bagdad and Fenner.

L. N. Inskeep, penmanship and free-hand drawing; Miss Bell Stites, drawing and painting; Henry Ludlam, elocution; Miss Emma F. Rider, M. M., instrumental music, voice culture, theory and practice; Miss Kate C. Rider, M. M., instrumental music.

Other Institutions.

Other educational institutions of the city are: Occidental University (Presbyterian), Rev. S. H. Weller, president; Ellis Villa College (young ladies), Prof. Henry Ludlam, principal; St. Paul's School, for young men (Episcopal), under management of Rev. Elias Birdsall; Los Angeles School of Art and Design, Los Angeles Conservatory of Music, Girls' School of Sisters of Charity, Boys' School of Santa Vibiana Cathedral, Woodbury Business College, Los Angeles Kindergarten, and numerous private schools.

CHURCHES, ETC.

Religious and Other Organizations of the City.

Los Angeles contains 42 church organizations, 39 of which occupy buildings of their own. They represent nearly every shade of every creed, have a fair membership and a steady healthy growth, and are well attended. The following is a list of the city churches:

Presbyterian	9
Methodist Episcopal	8
Congregational	6
Protestant Episcopal	4
Baptist	4
Roman Catholic	3
Christian	3
Unitarian	1
Lutheran (English)	1
Lutheran (German)	1
Lutheran (Swedish)	1
United Presbyterian	1
Methodist (German)	1
Methodist (South)	1
Holiness Band	1
Latter Day Saints	1
Hebrew	2
Seventh Day Adventist	1
Free Methodist	1
Salvation Army	1
Swedish Methodist	1
Swedish Baptist	1

YOUNG MEN'S CHRISTIAN ASSOCIATION.

Within the last year, this organization has occupied part of its new building, situated on Fort street near Second, adjoining the California Bank building. Nearly \$80,000 has already been expended on this beautiful block, which when entirely completed and equipped will cost \$125,000.

A practical work is carried on by this association among the young men of Los Angeles, varied and adopted to the needs of young men in general.

A lecture course, by the best talent obtainable, and entertainments of a high order are carried on during the season. The association is assisted in this work by the Ladies' Auxiliary of the association, composed of about 100 ladies, of which Mrs. J. D. Burch is chairman.

Young men coming as strangers to the city are aided in securing boarding places in good families, and as far as possible assisted in securing positions. A monthly average of over fifty visits are made to sick young men, and in several instances young men have been interred by the association in its lot at Evergreen.

A gospel meeting for young men is held on Sunday afternoons at 4 o'clock, attended by about 300 young men.

The reading-room and parlor, open every day from 8:30 a. m. to 10 p. m., are largely attended, and form a pleasant home to strangers and others. Many of the most successful and prominent business men of the city are members of this rapidly-increasing organization, of which Mr. F. A. Seymour, M. D., is president, and Mr. A. P. Chipron is acting general secretary.

Other Christian and benevolent institutions are: Woman's Christian Temperance Union, Young Women's Christian Temperance Union, Los Angeles Humane Society for the Prevention of Cruelty to Children and Animals, Los Angeles Orphan Home, Ladies' Benevolent Society, Italian Benevolent Society, Unione e Fratellanza Garibaldina, Order of Good Templars, Sons of Temperance, Ladies' Aid Society, Ladies' Missionary Society, Arion Band of Little Missionaries, Flower Festival Society.

The Flower Festival Society holds every year, in the month of April, a festival lasting a week, at which the display and decorations are entirely of flowers and foliage.

The lady managers realize large sums of money, which are expended in the maintenance of the Woman's Home and the Woman's Exchange. For the former they have a large, handsome building, with accommodations for 70, where working girls and women can have a respectable home at a moderate price. The latter was established to provide a place for the sale of women's work, to furnish a mart where those women who have to support themselves or eke out a slender income by small articles of manufacture, needlework,

embroidery, preserving, etc., may reach the public.

Following are the hospitals of the city:

- Los Angeles County Hospital.
- Los Angeles Infirmary, conducted by the Sisters of Charity.
- St. Paul's Hospital.
- Southern Pacific Railroad Hospital.
- Santa Fé Railroad Hospital.
- French Hospital.

MANUFACTURERS.

The Industries of Los Angeles City—Annual Product, \$3,154,593.

Statistics compiled by the Board of Trade show that the manufacturing industries of this city turn out an annual product of \$3,154,593. These figures are compiled from only partial returns, and do not comprehend many of the heaviest establishments in the city.

According to the most reliable returns there are the following manufacturing establishments in Los Angeles:

Asphaltum works	1
Bakeries	24
Beds and bedding makers	11
Blacksmiths	27
Book-binders	2
Boiler-makers	75
Boot and shoemakers	3
Brass workers	1
Breweries	1
Brick manufacturers	15
Cabinet makers	5
Cane manufacturers	1
Carpet-beating works (steam)	4
Carriage and wagon makers	21
Wood carvers	2
Cement works	6
Chair manufacturers	3
Cider manufacturers	1
Cigar manufacturers	10
Coffee and spice mills	4
Cold storage and ice works	5
Confectionery manufacturers	4
Desk manufacturers	3
Distilleries	1
Door and sash factories and planing mills	1
Dressmakers	103
Dyeing and scouring works (steam)	11
Electricians	5
Electric light companies	1
Electrical apparatus manufacturers	1
Electrotypers	1
Engravers	5
Fireworks manufacturers	1
Flavoring extract manufacturers	2
Flour mills	2
Founders and machinists	5
Fruit-canning, drying and crystallizing	2
Furniture manufacturers	2
Galvanized iron workers	7
Gas companies	1
Gas machine manufacturers	1
Gilders	2
Ginger ale manufacturers	1
Glove manufacturers	1
Harness and saddlery works	28
Ice cream manufacturers	7
Iron foundries and works	7
Jewelry (manufacturing)	6
Laundries (steam and white labor)	11
Lime burners and dealers	7
Lithographers	1
Locksmiths	4
Mantel manufacturers	5
Marble works	7
Mill builders	2
Milliners	24
Feed mills	2
Wineries	5
Oil refineries	1
Painters (fresco)	3
Painters (house, sign and ornamental)	33
Paper hangers	16
Paper manufacturers	1
Patent medicine manufacturers	5
Pavement manufacturers	12
Perfumery manufacturers	13
Photograph galleries	2
Pickle manufacturers	2
Plasterers (contractors) and whitewashers	7
Pork-packers	1
Potteries	1
Printers (book and job)	23
Publishers (including newspapers)	43
Rubber stamp-makers	3
Screen manufacturers	5
Seal engravers	2
Sewer pipe-makers	5
Sheet iron-workers	4
Shoddy mills	1
Show case manufacturers	1
Stair-builders	4
Stamping and pinking works	1
Stereotypers	1
Stone yards	7
Straw works	1
Tailors	45
Taxidermists	1
Tent and awning-makers	4
Tin-can manufacturers	1
Trunk-makers	1
Upholsterers	10
Vinegar manufacturers	2
Water pipe-makers	7
Willow ware-makers	2
Windmill makers	9
Wire-workers	2
Wood engravers	1
Wool-pullers	1
Yeast manufacturers	1

Total.....\$3,154,593.

IN A NUTSHELL.

Statistics About Everything Generally.

The cash on deposit in the banks of the city and county of Los Angeles, July 1, 1889, was \$10,329,063.66.

The total capital stock (paid up) and surplus of the banks of Los Angeles city and county, July 1, 1889, was \$4,724,380.04.

The total available cash of the banks of Los Angeles city and county (money

on hand and in other banks), July 1, 1889, was \$5,290,879.96.

The total assets of Los Angeles city and county banks, July 1, 1889, was \$15,571,798.78.

The total assessed wealth of the State is \$1,111,590,979.

The total assessment of Los Angeles county, after equalization and deduction for Orange county, is \$84,376,319. This does not include railroads, assessed by the State Board of Equalization.

The total assessment set off to Orange county is \$9,270,767.

The rate of assessment for State and county purposes is \$1.50 on the \$100 in the city limits, and \$1.80 in the country.

The rate of city assessment is \$1.10 on the \$100.

The total outstanding bonded indebtedness of the county is \$751,520. No floating debt.

Total number of acres in Los Angeles county assessed, 1,652,928.

The fees of the County Recorder's office for the year were \$23,627.40.

The County Clerk collected fees during the year amounting to \$44,011.12—an increase of 35 per cent. over the business of the year before.

The total disbursements for carrying on the county schools during the past school year were \$380,419.20.

Bonds to the amount of \$219,540.68 were sold during the year for the purpose of erecting and furnishing school buildings outside of the city of Los Angeles.

The total assessment of the city of Los Angeles, after equalization, is \$46,997,101.

Graded and graveled streets constructed during the year in the city, 55,080 feet; cost, \$133,576.03.

Paved streets, 11,590 feet; cost, \$104,637.70.

Sidewalks laid, 39,352 feet; cost, \$22,839.50.

Sewers laid, 17,763 feet; cost, \$20,458.40.

There are seven parks and a nursery belonging to the city, upon which was expended last year \$21,833.49.

The sum of \$200,000 in bonds was voted by the city last year to furnish new school lots and buildings.

Number of school children in the city, according to Census Marshal's report, 10,786; number enrolled in the public schools, 8128.

During the year 4771 volumes were added to the Public Library, and elegant new quarters in the City Hall have been fitted up.

The total expenditures this year (since April 1st) on the Library amount to \$21,428.46.

The police force of the city numbers 90 men, exclusive of the Chief and Marshal. The arrests from January 1st to November 30, 1889, inclusive, numbered 3407.

Los Angeles has 888.88 inhabitants to each officer.

The city license collections amount to an average of over \$16,000 per month.

The total revenue to the city from sales of water amount to \$11,991.15; total expenditure, \$10,100.18.

The City Tax Collector reports total collections for the year ending November 30th, \$978,106.04.

Total number of building permits issued from August to November 30th, 194; total cost of improvements, \$759,575.

The total amount invested in buildings in Los Angeles during 1889 approximates \$4,428,019.

There were 166 fire alarms in 11 months, to December 1st, and the losses aggregated \$81,220.

In the decade from 1880 to 1890 Los Angeles has increased in population from 11,183 to 80,000.

The taxable wealth of the city has increased during the same period from \$7,627,632 to \$44,871,073.

The total number of transfers of real estate during the year was 18,545, aggregating in amount \$35,309,468.

The Southern Pacific Railroad Company forwarded 34,403,549 pounds of freight from Los Angeles station during the year.

Wells, Fargo & Co. report a freight traffic of 7,150,104 pounds.

There are 1050 telephones in use in the city.

The Postal Telegraph Company opened an office in this city last year.

The first two barracks of the National Soldiers' Home were completed during the year and the home established in full running order.

Six hundred and eighteen vessels of all kinds arrived at the port of Wilmington during the year. Domestic tonnage, 441,753; foreign, 47,747; total, 489,500.

The imports of lumber at the port of Wilmington were 48,924,000 feet; coal, 73,015 tons; merchandise, 29,090 tons; railroad ties (number), 962,650.

The collections of the port of Wilmington for the year were \$58,660.23.

From January 1st to December 1st there was no day when the thermometer fell below 32 degrees Fahrenheit (the freezing point). There were twenty hot days when the mercury climbed above 90 degrees.

The United States Land Office dis-

posed of 161,444 acres of land for \$98,834.89.

The total internal revenue collections in this city for eleven months amount to \$147,881.

PETROLEUM.

The Production of Southern California.

Nearly all the petroleum deposits of the southern counties are situated in Los Angeles and Ventura counties, and which occupy an area of 250,000 acres. This important product is rapidly becoming one of the most valuable in Southern California, the yield for 1889 aggregating in value \$1,200,000. Its utilization as fuel for manufacturing purposes has had much to do with solving a vexed question in Southern California.

Following is a report of the petroleum produced in this State during the past 10 years, nine-tenths of which is produced in Los Angeles and Ventura counties. The figures represent gallons:

1879	568,000
1880	1,768,000
1881	4,194,000
1882	5,403,000
1883	6,000,000
1884	6,000,000
1885	8,700,000
1886	10,950,000
1887	12,400,000
1888	15,000,000
1889	18,000,000

The value of this immense deposit of petroleum to Southern California can hardly be estimated.

As yet the supply is not sufficient for refining purposes and to supply all demands for crude at home and to export. A pipe line to carry petroleum either from the fields of Santa Paula, Ventura county, or Puente, Los Angeles county, to the city of Los Angeles has been much talked of, and some day will doubtless be accomplished. With such cheap transportation the price of petroleum could be reduced to such figures as to encourage the establishment of many manufacturing enterprises here.

The Sespe Company already has an extensive pipe-line system from its wells to the wharf at Santa Paula, whence it is shipped by vessel to the refinery at Oakland.

The production of the several fields now in operation is placed by experts at the following figures:

District.	No. Wells.	Daily Production.
Sespe	25	800
Ex-Mission	43	263
Newhall	33	120
Puente	14	130
Tower Canyon (new)	3	130
Montecito	1	40

Total daily production..... 1340

The Sespe Oil Company has closed a contract with the Simi Land Company to sink a well for development in the Simi ranch.

Wages.

The following rates are obtained in Los Angeles:

Housekeepers, per month	\$25 00 to \$40 00
Girls (house servants), per month	15 00 to 30 00
Cooks (men and women), per month	20 00 to 100 00
Laborers, per day	1 50 to 2 50
Carpenters, per day	2 50 to 3 50
Brick masons, per day	3 00 to 5 00
Plasterers, per day	3 00 to 4 50
Lathers, per day	3 00 to 4 50
Painters, per day	2 50 to 3 50
Harness-makers, per day	3 00 to 4 00
Turners and plumbers, per day	3 00 to 4 50
Clerks (store), per week	8 00 to 25 00
Bookkeepers, per month	50 00 to 125 00
Clerks (office), per month	35 00 to 100 00
Farm hands, per month (and board)	25 00 to 40 00
Bakers, per month	30 00 to 80 00
Butchers, per month	30 00 to 80 00
Paper-hangers, per day	3 00 to 4 00
Job printers, per week	20 00
News compositors, per M.	45
Book compositors, per M.	45
Evening compositors, per M.	45
Book binders	2 50 to 3 00

"Hub" of the Bean-growers.

Salicoy, Ventura county, is the "hub" of the bean-growing industry, and claims the blue ribbon for the largest shipments of farm produce made on the Ventura division of the Southern Pacific. There have been shipped out for the 12 months to November 1, 1889:

Beans	Pounds.
Beans	3,077,935
Barley	1,664,540
Hogs	500,000
Corn	340,350
Cattle	140,000
Sheep	80,000

For the month of November, 1889:

Beans..... 1,049,745

Projected Improvements.

Plans are under way by Frank J. Capitan, architect, for the following buildings to be erected:

	Approximate Cost
Portland cement factory, with capacity of 400 barrels output every 24 hours, in close proximity to Los Angeles	\$150,000
Grain elevator, capacity 250,000 bushels	80,000
Arrangements are being made for the erection of a distillery, to be built at Los Angeles	75,000
J. K. McIlhenny, two-story brick stores and lodging, Marchessault street	5,500
S. C. Hubbell, two-story brick stores and lodging, Marchessault street	4,800
Grand total	\$315,800

ESTABLISHED
1881

Annual Trade No. 48 pages. 15 m.

Los Angeles Times



CAPITAL, \$250,000.



The National Bank of California

AT LOS ANGELES,

Northeast Corner Spring and Second Streets.



BOARD OF DIRECTORS:

GEORGE H. BONEBRACE.....President
JOHN BRYSON, Sr.....Vice-President
F. C. HOWES.....Cashier
E. W. COE.....Assistant Cashier

Los Angeles National Bank,

U. S. DEPOSITARY.

Capital, \$500,000. Surplus, \$75,000.

DIRECTORS: W. G. COCHRAN, PERRY M. GREEN, JOHN BRYSON, Sr., F. C. HOWES, H. SINCLAUGH, COL. H. H. MARKHAM, GEORGE H. BONEBRACE.

OWEN H. CHURCHILL.....Los Angeles
THOMAS R. BARD.....Hueneme
GEN. M. H. SHREMAN.....Phoenix, Ariz.
DR. W. L. GRAYNE.....Los Angeles
CAPT. GEORGE E. LEMON.....Washington, D. C.
E. F. C. KLOCKER.....Los Angeles
DAN McFARLAND.....Los Angeles
FRED HATON.....Los Angeles
PERRY WILDMAN.....Los Angeles
W. G. HUGHES.....Los Angeles
J. M. C. MARBLE.....Los Angeles

OFFICERS:

J. M. C. MARBLE.....President
OWEN H. CHURCHILL.....Vice-President
W. G. HUGHES.....Cashier
PERRY WILDMAN.....Assistant Cashier

STATE LOAN AND TRUST CO.

OF LOS ANGELES.

CAPITAL, \$1,000,000.

GEORGE H. BONEBRACE.....President
JOHN BRYSON, Sr.....Vice-Presidents
E. F. SPENCE.....Vice-Presidents
SAMUEL B. HUNT.....Secretary

Debenture Bonds For Sale.
Safe Deposit Boxes For Rent.
Interest Paid on Time and Savings Deposits.
Act as Trustee and Guardian.

MAP OF LOS ANGELES AND ORANGE COUNTIES.



Los Angeles Lith. Co.

The



Times.

Annual Number.

NINTH YEAR.

LOS ANGELES, CAL., JANUARY, 1890.

FIFTEEN CENTS.

1889 : : 1890.

THE STEADY STEP OF PROGRESS.

Our City of Los Angeles, Southern California's
Acknowledged Metropolis.

Striking Story of What Has Been Done All Along the Line
in a Twelvemonth.

Picturesque and Graphic General View of the Half-dozen
Promising Southern Counties.

Prominent Physical Features of San Diego, San Bernardino,
Santa Barbara, Ventura and Orange,

AND THE IMPERIAL FIRST COUNTY OF LOS ANGELES

Pasadena, Pomona, Santa Ana, Anaheim and Other Southern Towns—Statistical
and Business Review of the Year.

Agriculture and Horticulture—The Vine, the Fig and the Orange—Small
Farms and Farmers.

Practical Information About Lands, Prices and Crops—Openings for Settlers,
and Their Experiences.

Traffic and Transportation—Railway and Steamship Lines—Outlook for
More—No. of Vessels Arrived at Wilmington During the Year, 618—
Banks and Banking: Total Capital and Surplus, \$4,724,380—
Assessed Wealth of the County, \$84,376,319—Total Real-
estate Sales, \$35,309,463—Estimated Value of
Buildings Erected in the City, \$4,428,019—
Pictures and Poetry.

PROLOGUE.

Upon these sunset shores shall Freedom place
Her crown of empire; here shall arise the
Cities of the future resplendent with
The liberty which maketh great. The love
Of Freedom shall be strong as the rampart
Of these eternal hills, whose heads, pillowed
Upon the world-old firmament, for aye
Defy the earthquake and the thunderbolt,
And tell the patient stars the story of
Their centuries of life.

Passed hence the sun-
Browned children of the soil, whom Nature
had

So fondly nursed and fed, that here beneath
These skies the later offspring of progressive
Time should build his fairest citadels, and
Science light his torch, and poets sing, and
Modern Raphaels find divinest power,
And statesmen shape the laws for human
good.

O glorious empire of the Golden
West! Time itself shall slumber in decay,
And the wide and billowy ocean cease
To surge, and the transcendent mountains
fall

Prone on the sunlit valley's breast before
Shall perish here the love of Freedom.

ELIZA A. OTIS.

A GAIN the cycle of the seasons brings us to the time when we are called upon to publish our annual review of Southern California's progress, resources and prospects—the Annual Trade Number of the LOS ANGELES TIMES. In many sections of the United States the issuing of an annual edition—now become so indispensable a feature of modern journalism—is more or less a dull, tiresome and perfunctory task; a wearisome recapitulation of

oft-quoted facts and figures, which vary but little from year to year. Not so, however, in Southern California, this modern fairyland, where Nature has been so lavish, and where our progress is so remarkable that even the recital of a year's material progress, when put on paper, becomes a prose-poem. It is true that, this year, we have not to tell of the wonderfully rapid rise in values and the accumulation of sudden fortunes which characterized the boom period in 1887, but it is better so. The culmination of that glittering day-dream has, it is true, left us in some cases sadder, but generally wiser and more solidly prosperous men and women, more than ever convinced of the incomparable natural wealth of this favored section—a wealth which is inevitably destined to place us among the foremost of the most prosperous countries of the world—a wealth which a reaction from undue speculation may temporarily retard, but can no more suppress than a bank of sand can hold back the march of the incoming tide. We state a plain, unvarnished fact, when we assert that there are greater possibilities of wealth in the soil of Southern California than in that of any section of similar size in the United States—or, for that matter, upon the face of the globe. This is not an *ex parte* statement, for a traveled New York Senator has said that Southern California is a land of the greatest possibilities from the soil that he ever visited, while residents of those favored lands of Southern Europe

which produce the orange, the olive and the vine, express wonder, when they visit us, at our marvelous resources.

It is the special object of this publication to place before those at a distance, who are interested in Southern California, a plain, straightforward and conservative description of these resources and of the progress of a year. Our efforts have once more been specially directed toward a practical exposition of valuable facts. We commence by giving a general review of the coast—taking up the more picturesque features only in this subdivision—and then turning immediately to solid facts, embracing statistics of the five counties of Southern California, of their leading cities and towns, and, more in detail of Los Angeles city, the commercial capital, our agricultural, mineral, and commercial wealth, railroad systems and other prominent facts. A valuable feature of this issue is a series of interviews with Southern California home-builders, showing what may be done on "a little land well tilled," in this section.

We might have written three times as much, and yet have left much unsaid regarding the advantages of Southern California. Such a publication as this can only be considered as a guidepost on the high road. Should it be the means of turning the steps of some travelers toward this favored land, our labor will not have been in vain.

PICTURESQUE SOUTHERN CALIFORNIA.

COMPREHENSIVE DESCRIPTION OF THE CENTRAL REGION.

A Graphic View of the Larger Features of the Land and its Scenery—The Southern-most Counties.

[The matter under this heading is taken from that sumptuous and elegantly-illustrated volume, "Picturesque California," published by the J. Dewing Company, San Francisco.]

BORROWING a chapter title of the above-named work, "THE HEART OF SOUTHERN CALIFORNIA," we quote from it copiously. The county of Los Angeles embraces so large an area and includes such diversity of climate and scenery, so wide a range of products, and so much of the old dreamy life amid the new, that to describe it completely and yet concisely is extremely difficult. With 90 miles of coast; a range of mountains whose snowy summits rise above glowing orchards and verdant plains in winter, while cool sea breezes temper the summer heat; with numerous beaches and picturesque mountain resorts, and all the variety of a country teeming with beauty and interest, the pen gives way to the camera and brush, and the poet becomes the better historian. The scale is so large that a million mountain acres represent nothing in the estimate of values; the industrial and social development is so rapid that no account of it seems valid by the time the ink is dry.

Entering Southern California by either the San Geronimo or the Cajon Pass, the traveler experiences the charm of vivid contrast between lands of sun and lands of snow. The monotonous stretches of barren soil, the dim, confused outline of distant hills,

the meager, dust-covered vegetation, suddenly give place to a vision of snow-capped and forested mountains through which the highways lead into regions of almost boundless fertility. To the naturalist, however, even the desert seems a garden. Here and there patches of abronia work miracles of beauty, and the bristling cacti cheer his eye with their gay blossoms and awaken his curiosity by their strange armor and singular diversity of form. Glowing mats of *Opuntia* are varied by spaces of clean sand, on which the hateful "Chug" has scattered its dangerous joints; huge pillars stand covered with ivory hooks, and myriads of rosy pin cushions bristle with barbed spines; every form is warlike in its expression and attitude. In contrast with various prostrate kinds, the giant *Pitihayas* or torch-thistles often grow to a height of 40 feet, and distill from pure sunshine a delicious fruit, highly prized by the Mexicans. The bleached skeletons of these lofty torch-thistles, carved by the sand blast of the desert wind, stand like sentinels among their lowlier fellows. The exquisite natural face of their desiccated stems was closely imitated by the Indian women, who became skillful lace-makers in the days of the missions.

The approach to Southern California by the Cajon Pass is through straggling forests of *Yucca brevifolia*; seen by moonlight, their weird forms duplicated and magnified by the shadows cast upon the silvery sand, these forests afford one of the most fantastic sights in Nature. The Franciscan missionaries, who entered the country at San Diego, also found what seemed an insurmountable barrier to their progress in the rank growth of the desert vegetation; but as they advanced into the richly-wooded and fertile valleys of the interior, they were convinced that the cactus-covered mesas had been set to keep out intruders until the messengers of the Lord should come.

In the year 1771 Fathers Angel Somera and Benito Cambon reached the Santa Ana River, on their way to plant the mission of San Gabriel Archangel. They were amazed at the luxuriance of the wild oats, which grew taller than their horses, and the immense size of the oak and sycamore trees; and they rejoiced greatly at the profusion of wild grapevines and "Castilian" roses which adorned the cañons. In spite of this lavish beauty the name "Río de los Tremblores," which had been given to the river by a previous expedition, induced them to continue the journey some 20 miles to the northwest, where they reached the fertile uplands of the San Gabriel. There the Indian villages were most numerous, and there, on the first day of September, 1771, the holy bells were rung, and the image of the Virgin elevated in sight of a lofty mountain peak which they named San Bernardino; and all its dependent valleys were consecrated to civilization. After a few years of busy industry the mission was removed to its present site, eight miles from Los Angeles. Of its numerous buildings only two roofless adobes are standing, and the sheep-herder and his flocks are today the only moving figures in the quiet landscape. It was near this spot that a famous little battle was fought between the Mexicans and the United States troops in 1847.

On the opposite side of the river is Bas-

chito, the home of the last of the Mexican governors, where one may still enjoy the ancient hospitality, and find many traces of the old picturesque ranch life. Los Nietos Valley is famous for its immense yield of corn and vegetables and for its groves of walnut trees. Ranchito embraces 4000 acres of the tract, but is a mere garden-spot compared with what it was before the "perfidious Yankees" outnumbered the original proprietors.

Never had so lovely a land so hopeless a beginning. Yet from a handful of soldiers, trained to no useful labor, with hovels for houses, in a climate so seductive that only northern blood could resist its softening influence, the fathers by their indefatigable zeal and industry successfully replanted the old civilization on these extreme western shores. How the missionaries labored with their own hands in teaching the neophytes the simplest arts, and how they succeeded, is a matter of history. By the Indians the bricks were baked and the stones were hewn which went into the church edifices. The rafters were planed by dragging the logs down the mountain sides until they were reduced to the proper size for supporting the tiled roofs.

The San Fernando Valley is known for its fertility. A tract of 450 acres has lately been planted with orange trees imported from Florida. 90,000 acres of wheat and barley covered the floor of the valley in 1887. Seen in the rich green of its young growth, or in the gold of maturity it was a sight to be remembered; and not less so were the animated scenes which crowned the harvest. Bee ranches abound in the mountains, and 100,000 sheep feed in the upland pastures. It was here that Gen. Andreas Pico first refined the petroleum which has since become one of the most important sources of wealth to this region, a thousand barrels being taken daily from the Pico and neighboring cañons. The various gold placers worked at intervals since 1833 have yielded \$8,000,000 during the last thirty years.

A large portion of the San Francisco ranch, often spoken of as the *locale* of scenes described in "Ramona," and also as the place where gold was first discovered, lies in Los Angeles county, and Camulos, another notable ranch, is but a short distance from Newhall in Soledad township. This mammoth township, the Savoy of Southern California, covers an area of 1,200,000 acres, and has several centers of population. It is settled principally by health-seekers, because of its dry atmosphere. Grapes and other fruits are taken there by the carload for drying, and grape culture is likely to become its leading industry, though apples and small fruits flourish also. In the western part of this township lies Antelope Valley, where the finest quality of wheat is produced at an altitude of nearly 3000 feet.

Near Lang's Station are found ten thermal springs of varying temperatures, together with mud springs which afford relief from rheumatism. The proprietor of these springs is the hunter's oracle, having killed the king of the grizzlies, a formidable beast, whose carcass weighed 2000 pounds, and whose feet and skin were exhibited at Woodward's Gardens, San Francisco. The Los Angeles still relate the exploits of Adams, the celebrated bear hunter and collector of wild animals, who made that city the base of his supplies. He had trained "Lady Franklin," one of the most fascinating of grizzlies, to serve him as a decoy and also as a pack animal. Her appearance upon the Los Angeles plaza, under a burden of camp equipage, furnished greater entertainment than a bull-fight to the *muchachos* of the old capital. Around Elizabeth Lake, and four neighboring lakelets, there is still excellent hunting, and the whole region is a fresh field for the botanist.

From Antelope Valley to Anaheim is a long step, but in taking it the observer has the advantage of meeting many of the strong contrasts which mark this imperial county.

It was a happy idea of some prominent Germans in San Francisco to convert a tract of land near the Santa Ana into small homesteads for their countrymen. Out of this grew the "mother colony" of Southern California, one of the most contented and thriving communities in the State. Its fifty wineries are now manufacturing the product of more than 3,000,000 vines; but inasmuch as only one-third of each holding is devoted to grape culture, other fruits are cultivated, and grain-growing and sheep-raising are not neglected.

Orange, Santa Ana and Tustin contain a greater wealth of products than any other portion of the county. Of

these Tustin is . . . perhaps the most reposeful. In its depths of shade and long avenues of poplar trees it might be taken for a New England village. In March the orange groves are in their highest beauty. Each orchard seems finer than its neighbors, each tree more heavily laden than the last, as one moves along the shining rows from grove to grove. The air is filled with the mingled perfumes of orange and apricot blossoms, of poplar buds and sycamore tassels, of banks of sweet violets in the cottage gardens, and fugitive odors of wild flowers from thousands of untilled acres. And, better still, the Tustinese have, as far as possible, spared every native tree and are the wisest of their generation. These three villages are so closely connected by railroads, street cars and charming drives, that one is apt to regard them as one. They are also united in action for every public improvement and the adornment of their homes. Floriculture received much attention, and is clearly more than a fashion, since so many old favorites are seen among selected novelties from both hemispheres.

Raisin-making has become the chief industry at Orange, there being 10 to 15 square miles of vineyard in the neighborhood, planted almost wholly to the favorite raisin grape, the muscat of Alexandria. To this locality, perhaps more than any other, belongs credit for winning an enviable name for California raisins, leading eastern dealers, long wedded to Spanish brands, having recently given the palm to the product of this place. As in the wine districts of France, Germany and Spain, there is here and there a little spot only, which, from peculiarity and rare combination of climate and soil, comes to be known to the world by its choice vintage, so in California it is becoming apparent that certain products—raisins among them—can reach the highest excellence only in comparatively few and limited areas.

Though California vineyards lack as yet the picturesque peasant life which brightens those of Europe, like the pretty French girls in gay costumes; nevertheless, connected with the picking and curing and packing is many a scene not altogether prosaic. The bamboo hats of the Chinese pickers show like enormous mushrooms along the fragrant rows; long lines of drying trays absorb the abundant sunshine, and finally, loaded wagons move slowly along the lanes to the sweating and packing houses, where skillful hands give artistic touches to the most beautiful of crops. Many of the vineyardists prepare for market their own grapes, the wife and children, after due training, packing the bloomful clusters in layers with excellent skill. At Orange there are four large establishments for custom-packing. A single one of these put up and shipped 30,000 boxes of raisins in 1885, 60,000 in 1886 and 97,000 in 1887. The writer, wishing to be believed, hesitates to describe the corn and pumpkin and other vegetable crops of this delectable region. Nor can one attempt to give any adequate idea of what the productive capacity may yet prove to be when the great ranches are divided. The rapid increase of population is seen in the numerous new settlements and in the crowded condition of the hotels at Orange, Santa Ana, Tustin and Anaheim. The Hotel Palmyra, at Orange, recently opened, has already made for itself a good name among tourists, from New York especially.

Near by is the Quaker colony of El Modena, with 600 inhabitants, a fine schoolhouse, a neat church, and restfully beautiful views of the Santa Ana Mountains and of the valley, reaching to the ocean.

The transition from the active to the passive phases of life is very sudden in Los Angeles county, especially as we near the southern limits. Tustin City is the gateway of the San Joaquin ranch, which contains 48,803 acres, and the Lomas de Santiago 47,516 acres more. The Cajon de Santa Ana ranch belongs to the numerous Yorba families, who still retain many of their old homesteads and habits. Ramona, a fair daughter of the first Spanish proprietor, was the wife of an American known and respected equally by his neighbors of different nationalities as Don Benito Wilson. Mrs. Jackson took the name of "Ramona," the heroine of her story, from this source, and first heard it at the house of a daughter of Ramona Yorba.

In the Santa Ana Mountains are the most extensive apiaries. At the New Orleans Fair of 1884 and other later expositions the display of honey from the "Bee King" (Mr. I. S. Pleasants) attracted universal interest, not only for the intrinsic value and fine taste of the display, but for the consummate art by which the "blessed bees" were made to appear as exhibitors. In this vicinity is the home of Mme.

Modjeska who has found diversion in managing a stock farm, and renewal of strength in surf-bathing at San Juan-by-the-Sea. A bold rider and a fearless swimmer, she explores the wild cañons, and with her husband makes her camps where she can enjoy the scenery of the summits.

"H. H." once foretold the time when the native artists of Southern California would find their life and love in "picturing the cañons, the royal oak canopies, the herculean sycamores, the chameleon, velvety chaparral and the water-quarried gorges with their myriad ferns and flowers." But even "H. H." had never traversed the Santiago Cañon, one of the richest in all Southern California in groves and glades, in grape-vine hammocks and bridges, in cataracts and trout pools. In the month of April a carriage trip from Tustin to San Juan Capistrano is a delightful experience, for the land is seen in a state of nature. There is hardly a sign of human ownership until the mission buildings are in sight, and the billows of verdure are exchanged for a view of the peaceful ocean.

The San Juan Mission, founded in 1776, was for many years the largest and richest of all in cattle, corn, oil, wine and aguardiente. The main edifice was of stone, with a dome and vaulted roof, surrounded by cloisters still sufficiently well preserved to show the former importance of the mission.

Los Angeles, old and new, dense and straggling, growing out over a hundred hills, presents a shifting and bewildering panorama; for, like a rising tide, it is ever overflowing its boundaries, and hotels, cottages, churches, factories, schools and balconied villas spring to view in new places with magical rapidity. It now occupies an area of about 30 square miles, while outside of its present limits there are many embryo towns, villages and seaside resorts linked to it by 15 lines of railroad.

Earlier in the century all the well-to-do citizens lived upon level streets. San Pedro, Alameda and Main streets being the most aristocratic. The less-favored retired to the hills, whose narrow paths and zig-zagging stairways represented an ascending scale of poverty. These eyries, half hidden in curtains of scarlet geraniums, with cascades of roses overflowing their walls, were very picturesque, and commanded views, which, in later days, have proved fortunes to their possessors. All have been replaced by modern homes of rich and varied architecture which shows the cosmopolitan character of the city and its wealth.

The Baker block, the Catholic Cathedral and the Opera-house were the first buildings erected for public purposes which are worthy to outlast their century. In 1883-4 the Branch State Normal School building rose upon the Beaudry terrace, and in quick succession the Nadeau, Hollenbeck and other fine business blocks were built. Soon the old churches and schoolhouses were replaced by larger and more beautiful edifices. The Times-Mirror Building (Publishing-house), the Fort-street (California) Bank Building, the Clinton and Phillips blocks, and the Westminster Hotel, are all admirable for their purposes, and indicate a marked improvement in public taste.

There is no more enjoyable way of exploring this city of magnificent distances than by the numerous street-car and cable lines which connect widely-separated districts with its business centers. Nearly every visitor takes the three-mile trip upon the electric railway, and finds pleasant occupation for a day in riding through palm-tree avenues and long arcades of eucalyptus and pepper trees on the "bob-tail" car. From Boyle Heights where many charming private residences are found, the orchards, vineyards and hamlets which fill the valley of the Los Angeles River, open like a succession of pictures, and a comprehensive view of the city is obtained.

There are several small but pleasant parks in and around Los Angeles, and picturesque outlying districts are reserved for pleasure grounds on a more extensive scale. Meanwhile, Ellis and Figueroa streets, and other portions of the suburbs, are parks in eff et, the unfenced private grounds, spacious and exquisitely kept as becomes the Angelenos, being open to orderly visitors.

Standing upon the Beaudry terrace, or any of the heights which overlook Los Angeles, scanning the network of railways which surround it, and the many fertile and populous valleys tributary to it; knowing that of its 75,000 inhabitants, two-thirds of them represent the wealth, culture and energy of the Atlantic seaboard and the interior States, we may easily believe that here will be developed one of the brightest centers of civilization to be found in the world.

The seat of the University of Southern California is at West Los Angeles, near the Agricultural Park. This

unique institution is under the control of the Methodist Episcopal Church, which, casting aside all precedents, takes the most direct road to the attainment of its leading object, the training of missionaries of Christian civilization. It is well endowed and has an able corps of instructors. The colleges of Letters and Music are at West Los Angeles, the Medical College is in the center of the city; the Theological School is at San Fernando; the Agricultural College at Ontario, and the Freeman College of Applied Sciences at Inglewood, near Redondo Beach.

St. Vincent's College and other Catholic institutions of a high rank, and the excellent public schools, have been important elements in the recent growth of Los Angeles.

The Eagle Rock Valley, Glendale, the Verdugo Settlement and Cañon, the Ostrich Farm, Ivanhoe and Burbank, are unincorporated suburbs which still further enhance the charms of the City of the Angels.

The numerous seaside resorts of Los Angeles county are among its chief attractions. Among them Santa Monica is the best known, both as a watering place and an attractive town, not dependent upon birds of passage, or given over to dullness for half the year. It has fine churches and schools, and though it has no harbor, the rebuilding of a pier where the coast steamers formerly stopped will restore its facilities for ocean transportation. The winters of Santa Monica are by many preferred to the summers; for the long drives upon the beach are then most exhilarating, and the roads leading to Santa Fé Springs and other attractive places in the county are free from dust.

Long Beach is the favorite summer retreat of the Pasadenians, whose tents are giving place to cottages, as the spell of the ocean returns with season after season. This beach is like a continuous level floor for a distance of eight miles, making a most delightful road for driving, while a gently-sloping bathing ground, with a breadth of from 3 to 500 feet, lies along its course.

Redondo Beach, also, is connected with Los Angeles by a direct line of railroad, and has the advantage of deep-water frontage, as well as a fine sandy and pebbly beach, and a salt-spring lake or lagoon, the waters of which are denser than those of the ocean.

The new town of Inglewood commands a fine view of the city of Los Angeles and the Sierra Madre Mountains. The site was wisely chosen where grand avenues of eucalyptus and pepper trees are already grown and citrus orchards are in full bearing.

More than 20 miles from the beaches there have been sleeping on the breast of the Pacific two islands which are destined to become of great importance in the future of Southern California. They are a *terra incognita* to most people, though Catalina has long been a rival of the beaches as a summer resort, and is thought to afford the finest camping and fishing place on the coast.

Like the islands of the Santa Barbara Channel, Catalina abounds in earthen and stone memorials of a former age. There are many wild goats in the southern part of the island, and smaller game is plentiful. There is now a hotel on the island, and the round trip from Los Angeles, via San Pedro, from which daily steamer trips are made, is one of the most inexpensive and pleasurable for the tourist.

The other island, San Clemente, is more than 20 miles long with an average width of two and a half miles, and has only one inhabitant during most of the time. Twice a year a band of sheep-shearers visit the island, returning with the semi-annual clip; once a year the solitary herder visits Los Angeles, receives his year's pay, and after a week's vacation, goes back to his sheep. This way of life he has kept up for 20 years.

The site of Pasadena was known in early days as *Llano del Valle*, "the key of the valley," through which the people of Los Angeles and the Verdugo settlement went to the San Gabriel Mission for their supplies. In 1874, when the "Indiana Colonists" took formal possession of their lands, they changed the name to Pasadena, an Algonquin word, signifying "the crown of the valley." For already they saw upon its jeweled rim Santa Anita, a diamond in its loveliness of water and all the beauty that water develops; Sunny Slope, ruby-colored with the vestiges of years; and emerald Los Robles, the cherished home of a distinguished soldier, Fair Oaks gleamed modestly through its leafy setting; and, supreme in their beauty

and productiveness, were the old orchards and vineyards of the Wilson estate, seen from the windows of San Marino, the ranch house. This cluster of princely estates, and its nearness to Los Angeles, justified the choice of this tract for the colony's use—4000 acres of wild land, watered by a tributary of the Los Angeles River. The wise selection was a prophecy of the success since achieved.

Three miles from Pasadena, the Sierra Madre Villa, a favorite resort at all seasons, and a winter residence for invalids, contributed greatly to increase the number of beautiful homes in its romantic neighborhood. For here the mountain range is most picturesquely broken with deep cañons, and its peaks may be counted by the score between "Old Baldy" and the sea. The mountaineer no sooner conquers one summit than he is confronted with another apparently still higher, until standing upon Wilson's Peak, he has reached the rim of the local world. The floor of the Pacific, with its shimmering islands, seems very near; and the rich valley, with its grain fields, pastures, eucalyptus groves, orchards, vineyards, villages and villas, gives a human interest to the scene. This mountain is accessible all summer, and when there is no moon there is often a flaming campfire on the summit, lighted as a signal to watchers in the valley.

Between Santa Anita and Sunny Slope are extensive orange and lemon orchards. All these fruit farms are reached by the California Central Railway, and by a rapid-transit road from Los Angeles. Monrovia, "the gem of the foothills," is less than four years old, and is now an incorporated city, with flowery homes and the usual array of schools, banks, churches, newspaper and other institutions of a prosperous and civilized community.

The story of any one of the new settlements is the story of all. They were lighted in their turns like the lamps of a great city, and before the spectators had ceased to wonder, the pleasant slopes were bright with new homes.

Each has its own cañon and stream. The Big and Little Santa Anita and the Sawpit are wells for all the western group; the San Gabriel River and its tributaries supply a lower section of the valley.

"Old Baldy" or San Antonio Mountain is snow-capped during most of the year, and stands exactly upon the line dividing San Bernardino and Los Angeles counties. Dispensing his lights and shadows, and his radiant alpenglow impartially, he feeds Pomona to repletion with artesian and brook water, and leaves Ontario to gather its supplies from his tributaries. The San Antonio cañon leads into the heart of the range, where one finds the best of hunting and fishing and the richest studies of rocks and waterfalls. What Shasta is to the northern counties, this noble mountain, along with its loftier neighbors, is to the south.

The Casitas Sanitarium is pleasantly situated on a curve of the mountains northwest of Pasadena. In the same neighborhood the sons of John Brown of Osawatimie live in a log cabin and guide excursionists through the wild scenery of the Casitas trail.

The seasons of outdoor recreation throughout all this region afford for those who can avail themselves of the opportunity, a most idyllic experience. The accessibility of the numerous resorts, both the more popular and the less known, renders it an easy matter for all who can leave behind the cares of business and the heated centers of population, to seek the comfortable and salubrious retreats where the temperature is delightful and the air like nectar.

The Raymond and the railroads have stimulated the growth of Pasadena and made it a city. Beyond the corporate limits are many pleasant suburbs, which are linked to it by five lines of horse-cars, 15 miles of track.

Hourly railroad trains run to Los Angeles, and special theater trains three times a week.

Old San Gabriel, still half Indian and half Spanish, is yet dreaming under its vines and pomegranates; while "the Alhambra," near by, is a wide-awake, modern town.

[A further and detailed mention of the towns of the San Gabriel Valley will be found in another place.]

SOUTHERNMOST CALIFORNIA.

The "Lay of the Land" Down Towards the Mexican Line.

No other mountain commands such a view as that beheld from the highest peak of the San Bernardino range. Rising suddenly more than two miles above the general level of the plain and valleys around its base, "Old

Grayback" looks down upon the rarest combination of the old and the new, the rugged and the soft, the wild and the cultivated. From where the antelope looms up like a stilted ghost through the mirage of the sunlit plain, to the great gorge full of dense chaparral where the grizzly bear dozes away the day, seems but a step; and scarcely another step from the live-oak grove in the valley where the deer gazes upon the settler's cabin, to the almost inaccessible crags from which the mountain sheep survey undisturbed the world below.

From the top of this mountain the view is nearly all open, scarcely a ridge or belt of timber cutting off the view of the underlying panorama. Toward the east the great Colorado and Mojave deserts, each larger than the State of Massachusetts, lie gleaming beneath an almost eternal sun. Two little spots of green, one at Indio, the other at Palm Valley, fast brightening amid the broad waste of reddish gray, demonstrate that even these tremendous wastes are not wholly desert, but many of the large tracts of good soil which they contain will yet be reclaimed by water. Yet, barren as they look, these deserts seen from this height have an inexpressible power, which, riveting the eye, holds it long, before it turns to more pleasant scenes. It is the grandeur of power superior to man and his works, like that of the ocean, that makes him feel his littleness as he never felt it before upon land. For those who know their value these deserts have a special charm, and awaken feelings akin to pride and gratitude. They are a far greater blessing than if they had the rich soil and rainfalls of such States as Illinois. They are the great reservoirs of the pure dry air, that makes the climate which is the peculiar glory of California. The rising of the air under the heat of the sun causes most of the suction that causes the daily sea breeze to search every nook and corner of the land the long, dry season through. Flowing over westward, in a vast upper current, descending upon the ocean and mingling with the return current as it passes, it produces that dryness of the sea breeze which so distinguishes it from the sea air of the Atlantic Coast. By making the whole upper stratum of air excessively dry, it permits that rapid radiation of heat from the earth, which results in cool nights succeeding the hottest days, and with the sea breeze, turns the summer of this far southern land into a luxury instead of a terror.

On the south yawns the pass of San Geronimo, nine thousand feet deep, through which the Southern Pacific Railroad, looking like a spider's web dotted with gnats, winds out upon the Colorado Desert. Just across the pass Mt. San Jacinto rises in one mighty sweep almost to a level with our feet, making, it is said, on the desert slope the most rapid rise of any known mountain in North America—ten thousand feet in five miles. Leading away from the rocky head and timbered sides of San Jacinto and extending southward, the high and rugged mountain chain shuts out the fiery breath of the desert from the inhabitable country west of it. Tumbling toward the coast, in long lines of mountains, foot-hills and table-lands, until lost in the highlands of Mexico, the country presents a rolling confusion of blue, yellow, gray, brown, dark green and light green, arousing little suspicion of the rich valleys and slopes hidden amongst it all. Yet the settlement of San Jacinto at the mountain's base, Elsinore and Wildomar, nestled beside a sparkling lake, Murietta and Temecula, dotted with houses the great brown and yellow plains farther south, all warn the observer against deciding too hastily what those distant mountain chains may or may not inclose.

In its appearance no less than in its products is Riverside unique. Perhaps no important point in the State has been developed amid conditions apparently so unfavorable, and yet there are few of them that today are more interesting and attractive. To fully realize the change which intelligence and energy have wrought here, one needs to remember that only a very few years ago where now are many thousands of acres of shady orange orchards in the highest state of cultivation, there was only a broad plain of reddish *mesa*, with neither tree nor shrub to cool the dry expanse. Except for a few months in winter and spring, there was not a particle of verdure to indicate that wealth of fertility which the application of water has since developed. Now, for miles in every direction stretch the orchards and vineyards, the generous productions of which have made the name and fame of Riverside almost world-wide. Although scarcely more than a dozen years have passed since orange and raisin-growing was here an experiment, the shipments of oranges and lemons already amount to about 225,

000 boxes a year, and the raisin output to fully a quarter of a million boxes. The handling of this immense crop gives employment to a large number of people, and requires nearly a thousand cars to take it to its eastern markets.

Yet—Riverside is only the pioneer; scores of similar places are rising out of the plains.

Right where the great slope joins the base of the mountain, where five years ago there was scarcely a home, a group of towns is now rising amid springing orchards of orange, lemon, prune and apricot trees and broad fields of deep-green alfalfa. Redlands and Lugonia, the central figures of the group, with their handsome homes, business blocks, school-houses and churches rising amid their thousands of green acres, look down from their proud eminence over the whole great valley of San Bernardino. And besides these fair twin sisters and under the same splendid water system, Gladysia, Eastberne, Mentone, Terracina and Crafton are all following their lead, and the whole is fast becoming one settlement, already close upon the heels of Riverside and Arlington in productive capacity.

Away beyond where Riverside and Arlington unite in a solid mass of green, South Riverside is dotting the slope of the Temescal Mountains, springing from the desert under the water of Temescal Creek, drawn by long tunnels from the earth in which but a short time since it was deemed forever lost. And far over these Temescal hills we can look down upon the great plains by the shining sea where Orange, Santa Ana, and Tustin, Anaheim, Garden Grove and Westminster have risen in luxuriant beauty under the waters of the lower Santa Ana River, which trickles from these snow-banks at our side. All along the base of the mountain chain that bounds the valley of San Bernardino on the north the same scenes are repeated.

The mountain chain upon which we stand sinks suddenly thousands of feet into the Cajon Pass, some 20 miles to the west, but at once rises again in another range of mighty mountains almost as high, forming the north wall of the San Gabriel Valley. Along the base of this range runs the new line of the Atchison, Topeka and Santa Fé Railroad, and beside it, at frequent intervals, lie numerous towns, all of the same character, all born of water and iron rails, and shining in baptismal robes of green—Rialto, Cucamonga, Etiwanda, Ontario, Claremont and others, scarcely 2 years old. The line of the Southern Pacific runs only a mile from the Santa Fé line and parallel with it.

Almost in the center of the group below us lies the city of San Bernardino, surrounded by miles of deep green meadow, through which flow a dozen mountain streams, while hundreds of artesian wells sparkle amid the foliage of the dooryards, and gardens and orchards border the ditches that carry the waters above their native beds.

Probably nowhere else in the world can such extensive and perfect water systems be found for such limited populations as those of Riverside, Redlands and Lugonia, where abundance of water for irrigation is carried to every farm in ditches or cement pipes, and the purest of mountain water for domestic use is conveyed to every home in iron pipes under pressure sufficient to throw it over the top of the highest house on the highest hill in the settlement. And yet Nature has eclipsed all this at San Bernardino, where all over the city and throughout an area of 15,000 or 18,000 acres around it, artesian water of the purest quality is found in abundance less than 200 feet from the surface, and almost every family has its own water-works in the dooryard.

The highest point in San Diego is Mt. San Jacinto, 10,500 feet above sea level.

Forty miles back of San Diego the Cuyamaca range of mountains rises to a height of 6500 feet. This, like the other high chains in the southern part of the county, differs from the mountains of San Bernardino in an important respect. Instead of being elevated masses of rock and shingle and boulder, with a few incidental acres of good land scattered among them, they are simply vast elevations of rich, arable land, where rock and boulder are the exception. Hence they may be crossed with a wagon, and are nearly all occupied by farmers, many of the best farms in the country lying at an elevation where one would find no trace of cultivation elsewhere in the southern counties.

The summit of the Cuyamaca range is an easily-climbed pyramid of rocks, nearly three hundred feet high, reach-

ing above the tops of the trees, so that an unbroken view may be had.

Below us on the north lie long, rolling slopes, golden-hued with ripe wild-oats and grass, and scattered over them like a vast orchard are thousands of live-oaks. Upon these slopes are farms where the finest of fruits are growing without irrigation, in a region where the rainfall is so great that nothing ever fails except from too much watering. Lower down are broad plains, with thousands of acres golden with grain or tawny with stubbles, separated by high, boulder-studded hills, deep cañons filled with shade, or broad tablelands where the chaparral is fast vanishing as the tide of settlement advances.

Far out into the sea runs a long promontory and almost touching it is the end of a long peninsula reaching up from the south. Within this the light shimmers upon a spacious bay where large ships are riding at anchor, and outgoing and incoming steamers trail their sooty banners across the sky. Upon its shores lie San Diego and National City, fast merging into one, and on the peninsula that forms the harbor, another city, Coronado, is growing fast. Just to the north lies False Bay, upon which Pacific Beach and Moreno are springing up in the freshness of youth, and far away to the north Del Mar, Carlsbad and Oceanside stand fronting the sea.

Twenty years ago San Diego was started on two things, bay and climate. Under their influence it has grown to be a fine and wealthy city.

No sketch of Southern California would be complete without a glance at its remarkable development, of which no feature is more striking than the new vegetation that is taking the place of the old. Side by side are the products of two zones, each reaching the highest stages of development, yet none of them natural to the soil. Great vineyards bearing five or six tons to the acre of the most delicate varieties of Southern Europe lie by the side of wheat fields, of which the heads and grain far exceed in size and fullness the best of the famed fields of Minnesota or Dakota. Here the barley gives a return that no northern land can equal, and beside it the orange outdoes its race in the farthest South, and keeps its fruit in perfection when that of other lands has decayed. Scarcely a tree or shrub or plant with which our northern childhood was familiar that does not reach the fullest perfection here, nearly all reaching a size that makes them hard to recognize. Alongside of them grow the feathery palm and banana, the aloe, the india rubber tree and the tall white plumes of the pampas grass; with the nutmeg and camphor tree, and a score of other foreign woods, standing over lawns that shine with grasses unknown elsewhere in the United States. Instead of homely fences there are hedges of cypress, lime, pomegranate, *arbor vitæ* or acacia, over which the broad head and drooping arms of the Mexican pepper tree fill up the sunny openings that the stately shaft of the Australian eucalyptus has failed to shade. Here and there are the guava the Japanese persimmon, Japanese plum, the olive, nectarine and lemon, with groves of English walnut and orchards of prunes, figs, apricots, plums; pears, peaches and apples, meadows of alfalfa, gigantic corn, pumpkins and squashes that almost cover the ground, and gardens of vegetables that reach a fabulous size.

As the present civilization of this farthest West is superior to all that has preceded it in the great march of empire, so the older civilization was superior to any of that which moved northward from the old Aztec capital into what is now the United States. Even as the climate determines the character of the immigration today, so it seems to have affected the nature of the earlier settlement and brought and kept here a more intelligent and cultivated class of missionaries and rancheros than those of the other Spanish-American colonies.

UP THE COAST.

General Aspects of Ventura and Santa Barbara Counties.

Leaving Los Angeles by rail, the traveler, soon after passing Newhall, upon the line of the Southern Pacific, enters a broad and park-like valley, bordered upon one hand by a lofty, serrated range of mountains, whose purpling sides reflect the sunlight in a thousand varying shades, and upon the other by picturesque and beautifully rounded hills, clad at this season by lush grasses and waving grain, and dotted along their lower slopes by green orchards, of orange, walnut, olive and other fruits. This great valley has for 25 years been famous for its moist lands

and abundant crops. It has some of the best cultivated farms and orchards in the State. This is the Santa Clara Valley of the south, one of the most charming and fertile sections of Ventura county, and along the entire length of whose bosky course is laid the long, gleaming line of the Southern Pacific Railroad. Nature, especially in the upper part of the valley, holds many solitudes, and the rush of the iron-horse is like the intrusive step of the stranger. What has that dreaming valley, where Nature sleeps, and where solitude for long distances broods over every stream; where silence loiters amid the hills, to do with the life of today? Wrapped in its clear sunshine, breathing but repose and sweetness, shall it not sleep as for ages it has slept beneath bright skies, lulled by the song of its flowing river?

This may not be, for the advent of the iron horse is the sure signal of change. Though among the most fertile sections of Southern California, Ventura county has not been as extensively settled as the other coast counties, there being but five towns of any considerable size within its limits. The largest of these, San Buenaventura, which is the county seat, has a population of 3000. Its streets approach to the sands of the beach; the ocean fronts it, its blue channel stretching away to the islands of Anacapa and San Nicolas, crested with mountain heights, and standing eternal and vigilant sentinels, warding off the rough winds of the outer ocean. Behind the town is the lofty mountain background, whose sierra walls are over 2000 feet in height. Marvelous are their transfigurations in the changing lights, glowing with the dawn, white and bold and frowning in the noontide glare, wrapped in mellow tints and rosy lights as the afternoon advances, and veiled in effulgent brightness at sunset, which melts into royal purple as night approaches.

Fourteen miles to the southeast is the little town of Hueneme, the lively shipping point of Ventura county. Numerous great tributary ranches furnish vast stores of golden corn and grain, which are gathered into its warehouses for shipment. Oil and wine and honey also find their way to this port, together with all the products of field, garden and farm.

Sixteen miles back from the coast nestles Santa Paula beneath her hills, where the valley smiles with plenty, and sheltered cañons, where tropical fruits might be grown, run far back into the hills, fringed with trees, and melodious with running streams. Santa Paula is the entrepot of the oil industry of the county.

Saticoy is another town, eight miles east of Ventura, upon the line of railroad, in the midst of the Santa Clara Valley, and Fillmore and Sespe also lie upon this line, as does also Bardsdale, an infant town of three years.

The Santa Clara Valley extends the length of Ventura county from northeast to southwest, and through its center runs the river of the same name, which empties its waters into the sea about five miles southeast of San Buenaventura. Its principal tributaries—the Santa Paula, Piru, Big and Little Sespe—are fine, clear, living streams, furnishing an unfailing supply of water for all that portion of the county. The Ventura River, rising in the Santa Ynez Mountains, flows through the lovely Ojai Valley, and with its numerous tributaries waters an extensive region of country, and supplies the city of Ventura. Near to this river's banks is historic Camulos, set round with its orange and olive trees, and pleasant vineyards. It is here that the story of "Ramona" is located, and about the place its romance still lingers. It is the first station as you enter the county from Los Angeles.

Six hundred feet above sea level is the beautiful Ojai Valley. "A great amphitheater whose walls are mountains." Multitudinous live oaks grow in its midst and the hills are round about it as they were round about Jerusalem of old. Pure and life-giving and lung-healing is its air, and balmy the breezes that fan it. It is one of the most attractive resorts of the section, dear to the heart of the tourist and enjoyed by those who love Nature in her picturesque moods and where she breathes calm and quiet repose.

Overlooking it is Mt. Topo-Topo, rising to a height of five or six thousand feet. Upon the lofty plateau of the Conejo is found a succession of wooded valleys, beautiful for situation and guarded by lofty mountains. "The Piru Creek has cut its gorge through bituminous slate, granite, diorite, etc., leaving vertical walls on either side from one to two thousand feet high, reminding one of the Grand Cañon of the Colorado, and hardly less imposing."

Running along the border of Los Angeles county is the Simi Valley, and between this and the Santa Clara is the Las Posas, a fine

valley some four or five miles wide, and, like the Simi, rich in arable lands and with ever-varying landscapes. Hill and plain fill the foreground, and the illimitable mountains the grand background. Nature is nowhere insignificant in these regions, but she is serene, imposing and impressive, suggesting always untold possibilities for the future that is to come. The area of arable lands in this fertile county is capable, it is estimated, of supporting a population of 150,000, but within its borders there is not one-tenth of that number. So from all her solitary places Ventura gives out her invitation to immigrants to come and occupy her moderate-priced lands. Like other sections of Southern California, Ventura county is the land for homes, and where at the touch of labor will spring up prosperous farms, rich harvest fields, and abundant orchards. Its skies are fair; its fertile soil but awaits the plow to yield rich harvests of wine and oil, of fruits and grain, and all the abundance which Nature pours from the lap of Plenty.

Santa Barbara County.

This famous county embraces some of the most picturesque regions of Southern California. It is infinitely diversified, with high and rugged mountain ranges, which are sometimes snow-capped, beneath which slumber peaceful, sunny valleys, where grow the orange and the palm, the olive and the fig, and all the wide range of semi-tropical and temperate climate fruits. Into the very heart of these alpine-like ranges run also the wooded cañons, pulsed by running streams which rush on in leaping waterfalls, or through fragrant, tangled ways, and green stretches of open field, until they make their way to the sea.

The Santa Ynez range is a great wall uplift between the sea slope and the broader pastoral valleys which lie beyond it upon its northern side—valleys with their thousands of acres of wheat-fields and large stock ranches, where bands of sheep find pasturage, and cattle-dot the hillsides and plains, fat with the abundance of clover and succulent grasses. Vast in extent and varying in its productions is this garden county of the coast, where the old and the new life mingle, and the march of progress is seen. Side by side stand often the old adobe, built of sunburnt bricks, the remnant of a vanishing people, and the pretentious mansion of modern architecture, which marks the presence of a new civilization and the progress of westward empire.

The city of Santa Barbara is the chief town of the county, as well as its capital. Approached from the sea, it presents a charming picture. Lying upon a sunny slope fronting its southern gateway to the Pacific, nestled amid innumerable shade trees; fair with fragrant gardens; guarded on either side by low, rounded hills, with their swaying emerald of century-old oaks; with a background upon the right of lofty mountains, and upon the left the shining blue of the channel's waters, that stretch away to the mountained isles which touch the horizon's line, it lies cradled in sunshine and beauty. Upon a spur of the foothills, about two miles back from the white sands of the beach, rise the gray walls of the Old Mission, the most prominent landmark of the city. In its square old towers hang the Mission bells, whose echoes for a hundred years have crept the valley through, and sent their evening chimes sounding across the waters.

In some of the older portions of the town the ancient adobe still linger, and behind their high, blind walls are beautiful and fragrant gardens, where the orange ripens, and the banana droops its long boughs, from which may be gathered the pendant bunches of ripened fruit. Here, too, the dark-eyed and rose-red lipped *señorita* still loiters, and her dusky eyes peep shyly out from beneath her soft *rebosa*. But it is only here and there that the old life holds its own. The new is supreme. The railroad has brought the great world to the very threshold of this once somnolent spot, and the dreams of the past are being broken. Modern life does not dream.

Santa Barbara is a city of schools and churches, and the fame of her hostelrys has traversed the continent. She has numerous beautiful and pretentious homes, surrounded by an atmosphere of fragrance. The gardens of the city are the marvel of the coast. The present population is estimated at about 8000.

Six miles from the city of Santa Barbara, at the head of a wild and picturesque cañon, 1400 feet above sea level, are her mineral hot springs. Here are ample accommodations for visitors, in a pleasant home, among whose surrounding rocks and crags the wild eagle might build her nest and rear her young amid the airy silences, and

where the bear, in a rare mood of sociability, occasionally looks in at the open door, but makes off at the slightest approach to familiarity. The scenery at this point is wild and alpine-like, and to seaward the perspective is limited only by the limit of vision.

Three miles from Santa Barbara, at the base of the Santa Ynez Mountains, stretches the beautiful, orchard-crowned and vineyard-clad valley of the Montecito, with its elegant suburban homes, cultivated gardens and fields, wooded copses and vine-grown tangles. Here you find bits of primeval wildness, upon the enchanted borders of highest cultivation.

Further down the coast is the bosky and fertile valley of the Carpinteria. Within its limits are extensive fruit orchards, where every variety of semi-tropical and temperate-clime fruits is successfully raised. This valley, like that of the Montecito, is well timbered with a magnificent growth of native oaks and other trees, beneath which are being rapidly planted elegant homes surrounded by blooming gardens and billowy acres of grass and grain.

All along the coast are numerous side valleys, redolent with fragrance, and in whose sheltered depths the fig, the olive and all citrus fruits are nourished, and whose rippling brooks, flecked with the eternal sunshine, run to the sea.

From Santa Barbara many delightful trips may be made, than which there is none more enjoyable, perhaps, than the ride to and through Gaviota Pass, 38 miles along the coast to the westward.

The drive is near the shore, with the blue ocean waters on the left, and the grand uplift of bare and rugged mountains on the right. At their base are the sloping foothills, broken often by beautifully-wooded cañons, and covered at this season by lush and lustrous grasses. The road lies over the tablelands, or dips down the high walls of the cañons, only to climb their opposite sides to other tablelands beyond.

The Gaviota Pass is a mighty break in the Sierra, through which Nature has riven and tunneled for herself a pathway to the sea. A thousand feet sheer upward to the blue firmament rise the ragged precipices. The space between is so narrow there is only room for the rushing creek and highway. Grim, gray boulders hang far skyward, and away up on the heights may be heard the coyote's bark as he pushes on through those primeval solitudes. Overhead is a narrow line of blue sky, from which drop the golden lances of the sunlight into the rushing, babbling stream and the quiet highway.

Three miles beyond the pass, in a narrow cañon near the little hamlet of Las Cruces, are located hot sulphur springs possessing valuable medicinal qualities, and a few miles beyond is the noted fall of the Najoqui, a spot well calculated to attract the lover of the beautiful in Nature. It is situated in one of the widest and most attractive of cañons, across the head of which a rocky rampart is thrown rising to the height of 100 or 125 feet. Down this vast wall of rock leaps the wondrous waterfall. From base to summit, at its side, hang fringes of ferns, swaying in the breath of the fall, and watered by its spray. It drops into a clear pool which mirrors the shadows and reflects the sunlight. The hills here form a perfect grotto not wider than the height of the fall. They are covered with alders, cottonwoods, sycamores and oaks. The fragrant wild bay tree of California fills the air with its pungent odor. Wild vines clamber over the rocks, and a patch of blue sky is visible overhead. It is—

A sanctuary amid the hills, where Nature sits a queen, her throne the lofty heights where trees stand and wave their leaf-gemmed
Censers, and the sapphire skies bend low to Catch the rhythmic harmony of waters.

About an hour's drive from this spot, through as pleasant a valley, are the ruins of the Old Mission of the Santa Ynez. The site is an elevated one, and they stand a monument of loneliness and decay in the cloudless sunshine. The old barracks where the Indians found shelter in the early days of the Fathers have crumbled away till now they are only a moldering pile of fragmentary walls. Broken archways mark the entrance to the court. Windowless apertures yawn and show emptiness within. The old bells still hang in their crumbling towers, tied by strong strips of rawhide to the massive beams. Here and there the red tiles of the roof have fallen, but the walls are strong enough to stand another half century.

One of the most delightful valleys in Southern California is that of Los Alamos, which is some 14 miles in length and from one to two and a half

miles in width. It is a series of natural parks, walled in by rounded hills, which lift their dome-like forms, sometimes with only a crest of green and luxuriant grasses. These hills are none of them rocky; there is no underbrush upon their sides. Nature has made them all ready for the plow and the planter. Water has been found in never-failing supplies, it is claimed, by boring a few feet below the surface.

A few hours' drive further on is the important valley of the Santa Maria, whose broad bosom is in June an undulating sea of golden grains. Central City is located in the very heart of this valley. Long rows of eucalypti have been planted to mark the lines of yet unbuilt streets and avenues. They wonderfully enhance the beauty of the place.

Situated in the widest portion of the Santa Ynez Valley is the town of Lompoc, surrounded by rich, cultivable lands, and lacking only railroad communication for further growth and prosperity. The approach to this pueblo of the plains is striking in its extent of prospect and variety of landscape. The sleeping plains, the undulating hills, all lie steeped in flooding sunshine. Beyond the splendid growth of sycamores which stud the banks of the Santa Ynez the white houses fleck the wide level and mark the work of home-building. You can see for miles away over the level valley to its limits, where on every side it is circled round by hills, behind which rise loftier hills, and range after range of mountains.

At Lompoc are the ruins of one of the Old Missions, which cover a large extent of territory. The main walls have been used for some time as a stock corral, and where once the "Ave Marias" were said is now heard the lowing of cattle and the tinkle of cowbells.

Loading out from the Mission ruins are the remains of what might serve the enthusiastic and over-confident archaeologist for a Roman road, but which is nothing more than the depressions made in the deep and yielding soil by the rude, broad-wheeled *carretas*, used by the padres a century ago, when they worked hundreds of Indians in the construction of the massive adobe mission.

Skirting the base of the hill behind the town is an old *acequia*—a solid, stone-lined ditch filled with pure water drawn from the unfailing San Miguelito Creek.

Twenty-five miles from Los Alamos, in the elevated region of the majestic San Rafael range of mountains, is the Laguna Zaca, about 2000 or 3000 feet above the sea, and surrounded by elevations towering to the still grander height of 7000 feet. The lake covers an area of a hundred acres, and is supposed to be very deep, as the water is transparent as crystal. It is the Kohinor of these vast solitudes.

Among the picturesque ranchos of this section is the San Julian, stretching out over eleven leagues of territory, rich in its numerous living springs, brightened here and there by rippling streams, along their banks green forest aisles, and everywhere the solitary grandeur of Nature.

Among all the great stock ranches of Southern California, none is more famous or more fertile than the San Julian. It was once a cavalry rancho of the Mexican government, where the cavalry horses of the republic used to be sent to graze when not in service; and the land was subsequently granted to Gen. José de la Guerra as a recognition of services rendered the country as a soldier. He had his pick, and took the best.

The lovely Channel Islands, off the coast from Santa Barbara, are romantic points of interest. Their blue mountain walls rise across the channel like the gateways to another world. Those brown and seamed island fronts have watched generations of men come and go. They have seen civilizations appear and vanish. They stood there when man was cradled in the East, and have waited through all the centuries since then for that march of empire which has since reached their shores. They have grown so old that life has sprung from their volcanic ashes, and on their high crests and on their rugged rocks blooms the tender wild flower which they nurse, smiling because that out of that desolation beauty is born, and from the world's convulsions spring harmony and strength. There is no lovelier spot on either hemisphere for restful recreation than these channeled isles, lying like gems upon the Pacific, veined with beautiful, tree-fringed cañons, musical with leaping waterfalls, harmonious with the songs of running streams, with templed hills and lofty mountains, and with the

sounding anthem of the ocean deep,
poured forever upon their shores.

The beauties and the wonders of California lie all about our doors; yet we cross the seas to look at countries that have fewer charms, and to marvel at scenes that have less of picturesque beauty and no more of sublime grandeur than is to be found beneath the skies of this new Italy of the Occident.

E. A. O.

To the northward and westward of Santa Barbara county lies the great county of San Luis Obispo, not strictly included within the limits of Southern California proper, but rich in fertile lands, substantial productions, water and wood, fine farms and great stock ranches.



In bygone days, when the world was young,
And kindly Nature to her children gave
The varied blessings that to each belonged—
The gold of Ophir and the wealth of wave—
The nations gathered in that primal land
To take their portion at the Master's hand.

There stately Albion, with her cliffs of white,
And dusky Egypt of the jeweled night;
Here Farther India of the forest gloom,
And blest Arabia of spiced perfume;
All, all were gathered—saying only one—
Fair California of the southern sun,
Whom over dalliance in her hours of ease



With sensuous murmurings of tropic seas,
And blissful fragrance of a thousand flowers
Had made forgetful of the flying hours.

She missed her portion of the flashing gems,
The gold of Ophir and the diadems
That graced the sovereign of Sheba's brow,
And, humbly penitent, she cometh now
To seek some blessing in the master's face
To soothe the fortunes of a fallen race.

"Not gold nor jewels have I left," he said,
The while his blessings on her bended head
Fell soft and tender as an angel's tear
To soothe her sorrow and allay her fear,
"Be thine the glory of a better part



To bless the nations with the healing art,
The gentle virtue of thy balmy breath
To cure diseases and to conquer death,

So rising nations shall proclaim thee blessed
And pay thee homage in the farthest West."

So runs the legend of our southern land,
A seeming fable to a modern state;
Yet sober truthfulness to him whose hand
Can trace the writing on the wall of fate;
For, lo! emblazoned in the farthest West,
The Star of Empire on her peaceful breast,
The maid neglected by the Southern Sea
Stands radiant mistress of a Nation free,
And wields, triumphant, in her queenly hand
The jeweled scepter of a promised land.

CHARLES A. GARDNER.

The Winter of Sunland

O, tropic land! sun-kissed,
Crowned with the amethyst
Of the lush clover's bloom,
Through the winter's smiling noon;
Drowned on your hillside
With the orange tide—
Of your popples golden:
Fanned by the swaying palm,
Nursed in enchanted calm,
Steeped in fragrance sweet
Of rose and orange flower,
Life from each winter shower
Springs and wakes the earth from slumber,
Waking blossoms without number.
Violets peep dowy-eyed,
And the nun-like lilies rise,
While in scarlet pride
Stirs the gay polusetta,
Throwing off the wind's light fetter.

Deeper, vaster grow the skies,
And the fields the million spears
Of a standing army show;
Fragrant breath'd soft breezes blow,
And the golden orange spheres,
Like the starry planets shine,
While the vineyards yield their mine;
And the crystal rivers leap,
Waking from their summer sleep,
All their dry sands disappear;
The transparent atmosphere,
Seems to bring the whole world near.

Hark! we hear the robin's song,
And the mocking-bird sings clear
From the tall tree's highest bough—
Bend your ear and listen now,
Golden is the oriole's breast,
Flashing mid the green leaves there,
While he sings and takes his rest.

Like a river in the skies,
Is the lark's song, as he flies
Bathed in rippling harmonies.

Golden winged the butterfly,
Like a bit of sunshine gleams
O'er the crystal of the streams;
And with low, incessant hum,
Lo, the honey-bees do come—
Floating argosies of sweets—
Robbers of the honey hid
'Neath each drowsy blossom's lid;
And the quail calls soft and low,
As through quiet paths we go.

See the yellow daisies swing,
Hear the broeze-sweet bluebells ring,
While the cricket's steadfast call
Like the Angelus does fall,
When the Night her curtain drops
O'er the plains and mountain tops,
And the merry frogs we hear
Mid the reed-d shallows near.
Lovers are they of the clime
Where each month is summer time,
And their bluff old chorister
Tunes his flute wherever lie,
Shaded pools beneath the sky,
Where the waters seem to dream
In the shallows of a stream.

See the long brown furrows turned,
Where the shining plough doth speed,
Making ready for the seed
To be nursed by winter's sun.
Scarce a week before you see
Harbingers of harvesty
In the million blades which push
Through the soil. On tree and bush
All the sun's warm lances lie,
And ben-ath, in mimicry,
See the leaf-like shadows stir,
Lying on the water's breast,
Or in tangles in the grass,
Where the warm south wind doth pass;
And we hear the low, swift whirr
Of the birds' wings as they fly
Twixt the blue of sea and sky.

Summer dreams in Winter's arms,
And his cheek is never o'd;
Never turns the sunny gold
Of his shining locks to gray;
Never fade his winning charms—
Stalwart, strong, is he alway,
Never vexed and petulant,
Voicing only sweet content.

Dreaming like a maid he lies,
'Neath the splendor of his skies;
On his lips does Summer press
Kisses of lingering tenderness;
Blooming days are always here,
And why press about the bier
Of the old year as he dies,
Breathing softest harmonies,
Winged with Summer-warmth he flies
To his rest.

ELIZA A. OTIS.

"Midwinter" in Southern California.

O, land with lavish wealth o'erstrewn,
With tender Nature's every boon
Like beautiful bride endowed
That sittest by the gleaming sands,
And dreamest by Pacific's strands
'Neath golden groves embowered!

Afar, like shivering ghosts afraid,
The march of snowy hosts is stayed—
From dizzy heights they gaze,
"Thus far, no further!" and they stand
Obedient to the stern command,
In pallid, hushed amazement.

They gaze far down o'er flowery vales,
O'er gleaming strands, o'er snowy sails
As in the days long past,
When old Cabrillo on the breeze
Borne from the far-off Southern seas
Came like a spectre fast.

Like queens with golden diadems,
Bedecked with pearls and glittering gems
Now, cities dot the plains
As by Aladdin's magic power
New wonders spring from hour to hour,
A dazzling endless chain!

Midwinter! Flowers and fruit supreme!
The land lies slumbering in a dream—
No Boreas' blasts o'er sweep!
Beside the murmurous crystal rills
And on the swelling, emerald hills
The shepherd herds his sheep.

The golden orange gleams and glows
Drooping the tender-flushing rose,
And high and low of joy, and praise
Sing sweet their songs of "Midwinter" days—
For gift of soft "Midwinter" days—
"Midwinter" morned in Spring.

ALBERT F. KERCHEVAL.
Los Angeles, Dec. 25, 1889.

WINTER BY THE SEASIDE.

A December Day on the Beach— Water, Sky and Air.

Go with me to Redondo Beach and
together we will ride across the breezy
uplands. How delightful is the air
that sweeps inland from the sea. The
hills are as billowy with green grasses
as the shining water with its dancing
waves. They rise one upon another
like continuous rounded pyramids.
But they do not look time-old,
but young and fresh with
grassy blades and springing wild
flowers. Now we drop down into
the emerald cradles that lie between
them. The seagull, with white wings
spread, comes between us and the sky,
and what a wonderful sky it is. In its
depths there is such an intensity of
color and withal such depths of shinin-
g air. The lark springs from its
nest, and up and away it sings to
heaven. The squirrel peeps from his
hole, and his eyes are like round, black
beads that a monk might count upon
his rosary. The gopher, too, thrusts
his little head upward as if he re-
garded us as intruders and would like
to know the wherefore of our coming.

But by this time we have climbed
the gentle slope of another elevation.
To the left of us is the calm sea, and
a curving shore, and blue, far-away
heights.

"It reminds me of the Bay of
Naples," says one who has been
abroad, and whose eye has taken in the
wondrous curve of shore, the marvel-
ous coloring of the sea and the placid-
ness of the waters.

We ride onward in the soft, warm
December sunshine. What are those
orange-like blossoms that here and
there dot the hills? They are the
golden poppies of California. Did you
ever see such coloring, such perfection
of form, such awaying grace, such a
shimmering of light as you now behold
as the breezes sweep over them and
stir their slender stems?

We are on the summit now of the
highest hill. There is a white sand
dune between us and the sea, but wild
blossoming vines have taken root in it
and are striving to conceal its pallid
whiteness. They have covered all its
crest and dropped their graceful festoon-
s down its sides. They have
set in blossoming rubies, and the
purple of the allereas. Nature
objects to any barrenness at this
season, and so, even upon the
gray old seawall the mosses are spring-
ing, and bits of weeds have thrust
themselves in among the rocks.

Following the narrow trail we have
come to a shed where there is hay
stored, and where, if we put a stone in
front of the wheel, we can leave our
carriage in safety. So our horses are
taken out and tied, and a handful of
the clean, sweet hay is given
them. Everything is ready, so on
foot we begin the descent of the steep
sea wall. Steps have been cut in it
in the steepest places, and straggling
bushes throw out a bough to our help,
and clinging to it, as to a restraining
hand, on we press down our precipitous
path until we reach the low, sandy
beach.

Here, on a narrow, shelving level,
a few feet above the lightly lapping
waves, is the cabin of some
fisherman. It is a low,
rude wooden structure with a single
door and window. In the back wall
are built the narrow bunks where they
sleep. It has but one room, and that
is papered with illustrated weeklies.
There are numerous stories of life told
in those pictures. They give these
fishermen the only daily glimpse they
have of the great world.

But it is a bright December day, and
the warmth of the sunlight is flooding
earth and sea. It is only the Irishman
that we find at home. His two part-
ners are out in their little boat. We
see its white sail far over the blue
waters like the wing of a bird.
It looks motionless and still.
This genial fisherman brings some
wooden chairs for us, and
we all take our seats in front of the lit-
tle cabin. The song of the sea is per-
petual. Today it is like a lullaby. But
we see a wet line where, the night be-
fore, urged by the winds, it crept up
to within a few feet of the little cabin.
In front of us is a narrow canal cut

through the sharp rocks, through
which the boats come close in upon the
sands. It is some of Nature's own en-
gineering. The water is very deep be-
tween its banks. It is full of interest
to us.

But while we are studying it, and
our host is pointing out where lie San
Pedro and Long Beach, while we are
admiring the sharp promontory, thrust
out like a protecting arm beyond us,
that white speck has been coming
steadily toward us. Now we can see
the outline of the boat, which is being
by the breeze and helped onward, too,
by the fisherman's oars. Five, ten,
fifteen minutes, and it has entered the
rock-walled canal in front of us. Then
how carefully are the oars handled.
Straight on it comes, and as its keel
touches the sands, outleap the brawny
fisherman, and haul it upward upon
the pebbly shore. Two hours have they
been out, but not less than ten dol-
lars' worth of fish have they in their
boat's bottom. There are the white
fish, the splendid baracouda, and the
broad, flat flounder, besides numerous
others. Their sides are like mother of
pearl, so rich is their color.

It is a happy, if a lonely, life these
fishermen lead upon these Pacific
shores. Fish are plenty, and the sun-
shine is almost perpetual. Los An-
geles is ready to take all their catch,
and soon a new market will be found
just at hand, when the splendid hotel
at Redondo is open to the public. Life
from that point will run down to them.
Such stories as that intelligent Irish-
man can tell of the sea, will charm the
young folks—who drift thither, and
many a tourist will traverse that
rocky and precipitous pathway to
the fisherman's hut, and while the
low waves murmur upon the shore,
and the winter sun pours down its
gold, they will linger out of doors and
listen to the tales of the past and
watch the changing lights upon the
water, the beauty of the hills, and
dreaming lie within the arms of our
semi-tropic winter.

E. A. O.

Oil of Rose Geranium.

[Pomona Progress.]

"Southern California," said Senator
Frank Hiscock of New York to a news-
paper man once, "is land of the great-
est possibilities from the soil that I
have ever visited." The truth of the
Senator's remark becomes more and
more apparent to the people who keep
their eyes open and their wits
alive as they live in this section.
A gentleman who has for years
been engaged in the great perfume
factory of Solon Palmer, in York, has
called our attention to the great profit
that can easily be made here in the
simple article of oil of rose geranium.
The supply of this product is less than
half the demand. A pound of oil of
rose geranium is worth \$10 in New
York and all of the European cities.
At one time last season the oil was
sought after by the perfume manu-
facturers at \$15 a pound.

Here in Southern California, the
home of the geranium, where the
plants grow so luxuriant and so large
as to form hedges, is just the very sec-
tion where a large income can be had
from the production of oil of geranium.
Last year about \$225,000 worth of this
oil was imported from France, Cuba
and the Bermudas, where the gerani-
um does not begin to flourish nearly
so well as in California. In Europe
over \$800,000 worth of the oil is used
annually. The matter of producing
this oil in Southern California is cer-
tainly worth looking into, is it not?

Seedless Raisins.

[Fresno Republican.]

Seedless raisins for culinary purposes
must, sooner or later, come into general
favor. The presence of seeds in raisins
used in puddings, fruit-cakes, mince
pies, etc., detracts materially from the
pleasure of eating such luxuries, and it
is an aggravating task to "stone" raisins
before using them for such pur-
poses. Whenever it becomes gener-
ally known, therefore, that the same
quality of raisin can be secured
in a smaller berry without the
annoying seeds, such raisins will
not be of slow sale. The Sultana
grape makes a fair seedless raisin, as
also does the white Corinth, but
another candidate for public favor—
the Thompson seedless—is undoubt-
edly superior to either. Fresno grow-
ers should give a little more attention
to seedless raisins, and after they
are properly grown and cured,
they should then be stemmed and
properly separated into about three
grades for marketing. Seedless raisins
will probably never command such
fancy prices as Dehesia clusters or
London layers of the muscat variety,
but there is no good reason why the
seedless variety, with proper marketing,
will not soon occupy the field as first
quality cooking raisins, and give much
better satisfaction than the second-
grade fruit with seeds.

Los Angeles county has 895,557
orange and lemon trees planted in
orchards, and there are 1,018,328 trees
in nurseries that will be planted in the
next two years.

SOLID STATISTICS

Of the Wealth and Progress
of Los Angeles.How the Several Counties of the State
Are Assessed.How the Affairs of the City Have
Been Administered—State-
ments from Federal
Officers, Etc., Etc.

COMPILATIONS of figures showing the material growth and present status of Los Angeles county and city will be found in the following columns. They tell their own story with an exactness and force which can only be drawn from figures systematically and accurately arranged:

THE STATE.

Values of Property and Rates of Taxation for the Year 1889.
As shown by the books of the State Controller:

Counties.	Total Value of Taxable Property.
Alameda.....	\$1,896,182
Alpine.....	283,885
Amador.....	4,281,869
Butte.....	20,790,252
Calaveras.....	4,315,461
Colusa.....	24,365,995
Contra Costa.....	15,194,593
Del Norte.....	1,925,051
El Dorado.....	3,879,887
Fresno.....	1,892,844
Humboldt.....	18,440,872
Inyo.....	1,548,695
Kern.....	11,831,780
Lake.....	4,022,484
Lassen.....	2,527,449
Los Angeles.....	84,376,319
Marin.....	11,108,657
Mariposa.....	1,849,641
Mendocino.....	11,944,265
Merced.....	14,146,845
Modoc.....	2,993,084
Monterey.....	941,010
Monterey.....	15,536,037
Napa.....	14,970,181
Nevada.....	6,305,690
Placer.....	10,118,060
Plumas.....	2,369,441
Sacramento.....	54,460,174
San Benito.....	6,392,911
San Bernardino.....	23,367,955
San Diego.....	31,560,918
San Francisco.....	291,700,433
San Joaquin.....	38,802,606
San Luis Obispo.....	15,139,117
San Mateo.....	13,888,887
Santa Barbara.....	15,888,628
Santa Clara.....	53,112,662
Santa Cruz.....	11,160,230
Shasta.....	6,594,003
Sierra.....	1,679,388
Siskiyou.....	6,966,067
Solano.....	20,182,050
Sonoma.....	31,222,671
Stanislaus.....	16,581,737
Sutter.....	10,079,868
Tehama.....	11,901,255
Trinity.....	1,153,344
Tulare.....	24,343,013
Tuolumne.....	2,716,465
Ventura.....	20,911,325
Yolo.....	7,046,316
Yuba.....	9,270,767
Orange.....	9,270,767
Total.....	\$1,111,590,979

WEALTH OF THE COUNTY

AS SHOWN BY THE OFFICERS
BOOKS.

Digests of the Reports of County Assessor, Auditor, Recorder, County Clerk, Superintendent of Schools and Treasurer.

THE assessments for State and county taxation show the following results, the statement including also the values of Orange county, which was segregated after March 1, 1889:

Country real estate.....	\$26,290,329
Improvements.....	3,336,757
City and town lots.....	44,413,086
Improvements.....	16,129,783
Telegraph and telephone.....	54,335
Irrigating ditches.....	15,000
Total real estate and im- provements.....	\$90,280,190
Personal property.....	9,141,753
Money.....	146,750
Solvent credits.....	441,825
Total value of all property.....	\$100,019,518

TELEGRAPH AND RAILROAD LINES, ETC.	
Western Union Telegraph Com- pany's line, 161 miles.....	\$27,860
Sunset Telegraph and Tele- phone, 233 miles.....	11,500
Azusa Water Development Com- pany.....	15,000

L. A. & P. R. R. Co.—	
25 1/2 miles.....	49,250
Railroad franchise.....	1,000
Personal property.....	11,725
Southern Pacific R. R. Co.—	
Personal property.....	72,200
Land.....	150,110
Improvements.....	105,200
Telegraph line.....	9,769
Total.....	\$348,270
California Central R. R. Co.—	
Personal property.....	3,000
Land.....	172,225
Improvements.....	111,370
Telegraph line.....	5,115
Total.....	\$291,710

State, county and municipal bonds.....	25
Beehives, 13,871.....	15,065
Brandy, 108,637.....	20,497
Butter, 700.....	175
Calves, 4131.....	37,440
Casks and tanks.....	40,335
Cattle (beef), 721.....	12,355
Cattle (stock), 17,100.....	197,565
Coal, tons, 84,000.....	30,900
Colts, 469.....	113,340
Consigned goods.....	8,190
Cows, graded, 11,329.....	298,440
Farm utensils.....	53,980
Firearms.....	14,750
Furniture, saloons, stores.....	927,760
Franchises.....	61,320
Furniture.....	1,482,695
Goats (common), 540.....	685
Goods, wares and merchandise.....	2,186,240
Wheat, tons, 1704.....	34,040
Barley, tons, 26,603.....	16,985
Corn, tons, 1217.....	6,080
Harness, robes and saddles, 12- 043.....	98,940
Hay, tons, 9376.....	37,155
Hogs, 5750.....	19,330
Hobey, pounds, 33,200.....	870
Horses, thoroughbred, 203.....	85,875
Horses, American, 22,840.....	997,985
Jacks and Jonnies, 74.....	1,540
Jewelry.....	38,299
Libraries, law, etc.....	63,850
Lumber, feet, 9,448,000.....	220,556
Machinery.....	392,445
Mules, 1781.....	86,935
Oxen, 3.....	45
Pianos, 2011.....	204,785
Poultry, dozens, 14,708.....	35,180
Sewing machines.....	72,205
Sheep, graded, 152,382.....	213,195
Lambs, 5743.....	4,910
Steam vessels and watercraft, 62.....	62,590
Wagons, 12,705.....	480,430
Watches, 5901.....	93,815
Wines, gallons, 485,920.....	71,490
Wood, cords, 1559.....	6,375
Other property.....	220,623
Total.....	\$9,141,753
Value of property affected by mortgages.....	\$13,068,346
Trust deeds and mortgages.....	9,353,311

ACREAGE IN GRAIN.	
No acres sown, 1889—	
Wheat.....	50,760
Barley.....	35,290
Corn.....	17,400
Hay.....	17,040
Total acreage in grain.....	120,490
Total acreage assessed.....	1,652,922

THE NET ASSESSMENT.

From the above assessment the State Board of Equalization made a reduction of 10 per cent. After making this deduction and equalization by the Board of Supervisors, the County Auditor reports totals as follows:

Value of real estate other than city and town lots.....	\$24,569,935
Value of city and town lots.....	30,708,318
Total value of real estate.....	\$55,278,253
Value of improvements on lands other than city and town lots.....	3,236,444
Value of improvements on city and town lots.....	14,112,500
Total value of improve- ments.....	17,348,944
Total real estate and im- provements.....	\$72,627,197
Value of personal property, including money.....	9,038,578
Value of railroads assessed by State Board of Equal- ization.....	2,981,511
Total value of all prop- erty.....	\$84,647,086
Set off to Orange county.....	9,270,767
Net assessment Los An- geles county.....	\$75,376,319

THE TAX LEVY	
for 1889-'90 is as follows:	
Within city limits—	
State fund.....	7-23
Current expense.....	25
School fund.....	16
Hospital.....	10025
Courthouse and jail fund.....	10
Salary fund.....	1125
Interest and sinking fund, 1881.....	0013
Interest and sinking fund, 1882.....	0036
Interest and sinking fund, 1884.....	00685
Interest and sinking fund, 1885.....	0255
Interest and sinking fund, 1887.....	012
Total in city.....	\$1.50
Add for country-road tax.....	.30
Total in country.....	\$1.80

SPECIAL SCHOOL TAXES.	
Districts.	Rate.
Alhambra.....	\$0.42
Aliso.....	20
Alhambra.....	06
Artesia.....	25
Azusa.....	25
Azusa City.....	35
Belvidere.....	20
Bloomfield.....	20
Centralia.....	10
Clearwater.....	50
Compton.....	20
Crescenta.....	2.00
Calabasas.....	40
Delhi.....	07
Downey.....	45

Duarte.....	60
El Modena.....	1.20
Enterprise.....	40
Evergreen.....	70
Fullerton.....	60
Glendora.....	15
Harmony.....	30
Highland Park.....	1.55
Hyde Park.....	25
Hudson.....	10
Ivanhoe.....	50
Inglewood.....	20
Lamanda Park.....	30
Lancaster.....	15
Lankershim.....	35
Laurel.....	30
Long Beach.....	45
Los Virgenes.....	65
La Liebre.....	25
Monrovia.....	25
Morning Side.....	90
New Hope.....	1.50
Newhall.....	40
Ocean View.....	30
Old River.....	40
Pacoima.....	50
Palmdale.....	05
Palomares.....	25
Pasadena.....	35
Pico.....	85
Placentia.....	04
Providence.....	60
Ranchito.....	06
Redondo.....	1.00
Rosedale.....	25
San Gabriel.....	30
San Pascual.....	08
San Pedro.....	25
Santa Ana.....	25
Santa Monica.....	15
Sepulveda.....	20
Sulphur Springs.....	55
Soledad.....	12
Tejunga.....	50
Talanga.....	30
The Palms.....	06
University.....	1.20
Vineland.....	25
Vinevale.....	40
West Vernon.....	40
Wilmington.....	60

COMPARISONS.

An analysis of the tax levy shows that it has been slightly increased over the levy of 1888. That year's levy was \$1.20 in the county and \$1 in the city, thus making an increase of 60 cents in the county and 50 cents in the city. But this does not state the case accurately, because the State levy is increased for 1889. It will be remembered that the recent State levy is 72.2 cents, while the year before it was but 50.4 cents, an increase this year of 21.8 cents. So that in reality the county levy is increased only 33 and 28 cents respectively in the county and city for the current year. In 1888 the levy was made upon an assessment of \$103,000,000, while by the action of the Board of Equalization in reducing the assessment 10 per cent. the present levy is made upon an assessment of \$93,647,086, quite a reduction.

BONDED INDEBTEDNESS.

The total amount of bonds outstanding is \$751,500, and cash in the county treasury applicable to the payment of the indebtedness, \$25,049.37. There is no floating debt.

The bonded indebtedness of the county is arranged as follows:

FUNDED DEBT.	Am. bonds.	Int. of bonds.	Year of maturity.	Rate of interest.
Bonds of 1881.....	\$46,000	\$15,000	1901	6%
Bonds of 1882.....	4,000	45 0/10	1902	6%
Bonds of 1884.....	84,000	84,500	1914	6%
Bonds of 1885.....	437,000	407,000	1905	4 1/4%
Bonds of 1887.....	100,000	100,000	1907	4 1/4%
Bonds of 1888.....	100,000	100,000	1907	4 1/4%
Totals.....	\$812,000	\$751,500		

† Courthouse.
* Interest payable semi-annually.

COUNTY PROPERTY.	
Old Courthouse, estimated value.....	\$125,000
New Courthouse (now building).....	400,000
County Jail.....	60,000
County Hospital.....	50,000
County Farm.....	25,000
Real estate.....	35,000
Total.....	\$695,000

AUDITOR'S REPORT.

Showing the Financial Condition of the County.

Amount of bonds outstanding, \$751,500; no floating debt; interest paid at maturity; cash on hand to pay bonds, \$25,000; most of the bonds bear 4 1/4 per cent. interest per annum and command a premium of 7 to 10 per cent.

Value of real estate and county buildings, not including bridges, \$695,000.

State and county taxes charged to Tax Collector (to be collected), \$1,452,300.61; for State purposes, \$651,605.45; for county purposes, \$797,755.16.

Levied for redeeming school bonds and paying interest, \$81,678.42.

Of county taxes \$87,000 is for road purposes.

Rate of assessment inside cities, \$1.50; outside cities, \$1.80 on the \$100; State rate, .722 on the \$100; county rate (within cities), .778 on the \$100; county rate (country), 1.078 on the \$100.

Total number of acres of land assessed, 1,652,922.

SUMMARY.

Total value of all property not including railroad property.....\$100,019,518
Railroads in Los Angeles county, apportioned by State Board of Equalization.....2,981,511

Set off for Orange county, approximately.....9,270,767

Net assessment of the county.....\$94,367,230
Reduced by the State Board of Equalization to.....\$84,376,319

Mortgages assessed in Los Angeles county.....\$10,031,461

SCHOOL BONDS OUTSTANDING.

Districts—

El Monte.....	\$1,000
Little Lake.....	500
The Pass.....	730
Sepulveda.....	2,750
Pasadena.....	12,500
Tajanta.....	500
Downey.....	4,000
Placentia.....	1,000
New Hope.....	400
Wilmington.....	1,000
San Pedro.....	7,800
Palomares.....	16,000
San Pascual.....	85,000
Highland Park.....	16,500
Long Beach.....	6,000
Evergreen.....	21,000
Compton.....	1,000
Pico.....	2,500
La Cañada.....	2,400
Ocean View.....	1,000
San Dimas.....	1,500
Alhambra.....	6,500
Sulphur Springs.....	500
Azusa.....	2,000
Duarte.....	4,000
Harmony.....	4,900
Aliso.....	100
Enterprise.....	1,200
Earle Rock.....	500
Vinevale.....	1,500
Bloomfield.....	1,000
Crescenta.....	2,500
Santa Monica.....	4,000
Rosedale.....	28,000
Centralia.....	4,000
Providence.....	6,000
The Palms.....	10,000
El Modena.....	7,000
Morning Side.....	15,000
Ranchito.....	750
Inglewood.....	10,000
Glendora.....	4,000
Hyde Park.....	4,000
Pacoima.....	10,000
Belvidere.....	6,000
Tejunga.....	2,500
Artesia.....	3,000
Clearwater.....	8,000
University.....	4,000
Palmdale.....	1,000
Fullerton.....	8,000
Vineland.....	4,000
Monrovia.....	10,000
Lamanda Park.....	8,000
San Gabriel.....	10,000
Azusa City.....	9,000
Ivanhoe.....	4,700
West Vernon.....	12,000
Redondo Beach.....	5,000
Los Feliz.....	4,700
Lankershim.....	5,000
Lancaster.....	4,000
Old River.....	2,000
Soledad.....	2,500
La Liebre.....	1,500
Calabasas.....	2,500
Los Virgenes.....	1,500
Hudson.....	2,000

Most of these bonds bear 8 per cent. interest and are worth from 10 to 15 per cent. premium in the market.

COUNTY SCHOOLS.

Statement Compiled by the County Superintendent.

Following are miscellaneous statistics from the County Superintendent's office, for the school year ending June 30, 1889:

Number grammar schools in county.....	111
Number primary schools in county.....	308
Number high schools in county.....	1
Number grammar-school course.....	3
Number new districts organized.....	14
Number districts in county.....	133
Number new buildings erected.....	98
Number male teachers.....	333
Number of female teachers.....	433
Total number of teachers.....	433
Number who are graduates of California State Normal schools.....	144
Number who are graduates of other State Normal schools.....	78
Number who hold California life diplomas.....	64
Number who hold California educational diplomas.....	41
Number districts maintaining school eight months or longer.....	110
Average number months school was maintained in county.....	8.59
Average daily attendance in county.....	14,779
Total number enrolled.....	22,327

SALARIES.

Average salary male teachers, city.....\$103
Average salary male teachers, country.....89
Average salary female teachers, city.....90
Average salary female teachers, country.....75

For Library, books and apparatus..... 5,149 49

Total..... \$380,419 20

During the school year ending June 30, 1889, books to the amount of \$219,540.68 were sold for purpose of erecting and furnishing school buildings outside of the city of Los Angeles.

Since July 1, 1889, five districts have voted bonds, aggregating \$14,206, with which new buildings are now being erected.

THE COURTS.

How the Legal Business of Los Angeles is Done.

The legal business of Los Angeles county has assumed large proportions during the last few years. It became a necessity during past spring to increase the number of Superior Court judges from four to six; and the new city charter provided for the addition of a city justice and two police judges to the courts of the city. Since the organization of Orange county from a part of Los Angeles county all suits pertaining to Orange county have been transferred to it, but the volume of business shows but little diminution. In the Superior Courts the dockets are crowded, and the six judges have their hands full in holding their own and keeping along with the business.

By a carefully-arranged system all the civil business in the Superior Courts is handled by four of the departments, while the criminal cases all go to the other two. Were it not for the thorough system followed the six departments would not be sufficient to keep the docket from crowding up with unfinished business.

The different departments dispose of from 400 to 600 cases a year. Until recently there has been no general plan for keeping statistics of the number of cases tried, but each clerk of court now has a register of actions which he keeps, and it will be an easy matter hereafter to obtain definite figures in regard to the business of the Superior Courts.

The United States Circuit and District Courts during the past year have disposed of about 50 cases each, while about 75 cases have been filed in each court.

The justice courts transact a large volume of business. Justices Savage and Lockwood have each tried 600 or 700 cases during the past year, while Justice Austin has not had so many. The police judges in the number of cases tried are, of course, far ahead of all the other courts.

The following is a list of the different courts in the city, with the names of the judges and court officials:

United States Courts—Hon. Stephen J. Field, Associate Justice of the Supreme Court of the United States; Hon. Lorenzo Sawyer, Circuit Judge; Hon. Erskine M. Ross, District Judge; A. W. Hutton, Esq., United States Attorney; William M. Van Dyke, Esq., Clerk; E. H. Owens, Esq., Clerk District Court; D. R. Risley, Marshal; Charles L. Batchelor, Esq., Standing Master and Examiner in Chancery. United States Commissioners, William M. Van Dyke, Los Angeles; L. C. McKeeby, San Buenaventura; Charles Fernald, Santa Barbara; E. H. Owen, Los Angeles; John Mansfield, Los Angeles; M. L. Ward, San Diego.

Superior Courts—Department No. 1, W. A. Cheney, Judge; W. H. Crane, Clerk; C. J. Fox, Reporter; J. C. Cline, Deputy Sheriff.

Department No. 2, W. H. Clark, Judge; M. J. Ashmore, Clerk; Henry Henderson, Reporter; H. B. Abila, Deputy Sheriff.

Department No. 3, W. P. Wade, Judge; C. G. Keyes, Clerk; C. F. Rutan, Reporter; H. S. Chapple, Deputy Sheriff.

Department No. 4, Walter Van Dyke, Judge; F. E. Lowry, Clerk; F. H. McAllister, Reporter; J. C. Wray, Deputy Sheriff.

Department No. 5, J. W. McKinley, Judge; H. S. Knapp, Clerk; F. H. Longley, Reporter; H. C. McClure, Deputy Sheriff.

Department No. 6, Lucien Shaw, Judge; W. L. Warren, Clerk; Leo Longley, Reporter; Peter Reel, Deputy Sheriff.

Justice Courts—Township Court, Theodore Savage, Justice; J. H. Mellette, Clerk; H. S. Clement, Constable. City Justice Court, W. C. Lockwood, Justice; N. B. Walker, Clerk; Fred C. Smith, Constable.

City Justice Court, J. M. Austin, Justice; Joe Chambers, Clerk.

Police Courts—Owens, Judge; Stanton, Judge; Luckenbach, Clerk.

The Supreme Court of California meets in Los Angeles the first Monday in April and the second Monday in October of each year. The following counties comprise the district of Los Angeles: Santa Barbara, Ventura, Kern, Inyo, San Diego, San Bernardino, Los Angeles, Tulare, Fresno and San Luis Obispo.

Chief Justice, Hon. W. H. Beatty. Associate Justices: Hons. J. D. Thornton, Charles N. Fox, Van R.

Paterson, J. R. Sharpstein, T. B. McFarland, J. D. Works.

Officers of the Court: George A. Johnson, Attorney-General; W. P. Johnson, Deputy Attorney-General; C. C. Pomeroy, Reporter; J. D. Spencer, Clerk; B. C. Weir, Deputy Clerk, Los Angeles; Frank T. Meagher, Secretary; Henry C. Finkler, Secretary; E. A. Girvin, Phonographic Reporter; Ezra Washburn, Bailiff; W. I. Russell, Bailiff.

Commissioners: I. S. Belcher, H. S. Foote, Robert Y. Hayne, P. Van Clief, James A. Gibson, D. B. Woolf, Secretary to Commissioners.

SHERIFF'S OFFICE.

Fees Collected, Criminal and Civil Business Transacted.

The following report showing amount of work done by Sheriff's office of Los Angeles county during the year 1889 is furnished by Sheriff Aguirre:

	Gross Receipts	Disbursements	Paid County Treasurer
January.....	2,576 10	1,198 50	1,378 94
February.....	2,315 37	721 15	1,594 21
March.....	3,081 58	982 34	2,099 28
April.....	2,649 64	1,840 85	2,008 69
May.....	2,476 68	831 13	1,645 95
June.....	2,437 88	912 10	1,525 78
July.....	2,430 44	1,407 00	1,023 83
August.....	2,370 81	881 06	1,489 85
September.....	2,111 48	700 80	1,410 28
October.....	2,900 88	1,081 00	1,819 78
November.....	2,562 00	820 76	1,741 31
December.....	2,700 00	820 00	1,880 00
Totals.....	\$31,732 26	\$12,065 34	\$19,666 88

Number of convicts sent to State Prison, 60
Number of inmates sent to asylum, 60
Criminal subpoenas served during year, 3,000
Civil subpoenas served during year, 1,700
Grand jurors and witnesses, 400
Number of grand and trial jurors summoned, 600
Last case entered December 20, 1889, A. D. 12,027
First case entered January 1, 1890, No. 9,576
Number of tract cases, 9,576
Total number incarcerated during 1889, 2,079
Male, 2,006
Female, 73
Total number discharged, 1,902
Male, 1,873
Female, 29
Number now in jail, 104

COUNTY CLERK.

Business of the Office for the Years 1888 and 1889.

	1888	1889
Marriage licenses.....	1,059	1,201
Criminal cases.....	252	285
Probate cases.....	342	366
Civil cases.....	2,055	2,359

RECEIPTS.

	1888	1889
January.....	\$2,551 70	\$3,844 05
February.....	2,700 15	3,007 15
March.....	3,011 05	3,812 58
April.....	2,588 65	3,570 35
May.....	2,938 35	4,236 59
June.....	3,831 70	3,574 20
July.....	2,928 90	3,532 30
August.....	2,882 35	3,415 75
September.....	3,125 55	3,792 85
October.....	3,258 85	3,695 00
November.....	3,157 30	3,954 30
December.....	3,288 65	3,675 00

Totals..... \$30,313 23 \$44,011 12

Eight hundred and fifty veterans draw pensions through this office.

The fees of the office were reduced 20 per cent. by the last Legislature, taking effect in April, 1889.

All fees are paid into the county treasury.

The office nets the county about \$1500 monthly. Taking into consideration the reduction by the last Legislature the business of the office has increased about 35 per cent. during the year 1889.

*Estimated.

Recorder's Statement.

The following statement prepared by County Recorder John W. Francis, shows the number of folios received each month during the year, together with the fees collected therefor, and also a statement of those received from the same period in 1888:

MONTH.	Fees 1888	Folios 1888	Fees 1889	Folios 1889
January.....	\$6,615 55	241 89	\$4,399 99	188 32
February.....	6,761 20	233 41	5,079 15	224 24
March.....	7,447 05	310 61	5,569 20	237 56
April.....	6,741 23	208 76	5,038 90	238 55
May.....	6,754 85	211 48	3,931 70	251 49
June.....	6,435 65	258 14	3,713 30	192 07
July.....	5,538 05	232 02	3,584 00	187 21
August.....	5,235 80	222 16	2,975 05	133 62
September.....	5,191 20	206 00	3,253 95	132 12
October.....	5,114 53	212 88	2,371 81	166 18
November.....	4,649 83	184 31	3,248 25	173 07
December.....	5,453 35	211 98	3,730 60	195 00
Totals.....	\$72,659 25	2,926 71	\$40,820 60	2,397 74

* By an act of the Legislature at its twenty-eighth session, the fees for recording were reduced about 40 per cent. which took effect in April, and while the number of instruments filed for record this year will compare favorably with those filed in 1888, the fees received show a decided falling off.

County Treasurer.

Following is a summary of business transacted in the County Treasurer's office for one year, ending November 30, 1889:

Cash on hand, December 1, 1888..... \$ 209,577 74
Total amount received from all

sources..... 1,837,031 37

Total..... \$2,226,609 11

Disbursements for school purposes..... \$16,210 50
For building courthouse, 143,770 43
Interest and sinking funds..... 73,605 20
Other county purposes..... 712 128 38
Paid State Treasurer..... 518,280 85

Total..... \$2,068,005 35

Balance on hand December 1, 1889..... \$ 158,543 76

*Note.—This item includes salaries, libraries, special expenses, buildings, school bonds and coupons.

Comparisons.

A comparison of the assessments of the various counties of Southern California in 1880 and 1889 is interesting:

	Assessment 1880	Assessment 1889
Los Angeles.....	\$16,97,501	\$4,376,319
Kern.....	6,015 460	11,831,740
San Bernardino.....	2,576,973	23,207,951
San Diego.....	3,525,263	31,590,918
San Luis Obispo.....	4,376 034	15,139,117
Santa Barbara.....	5,337,038	15,888,223
Ventura.....	8,740,161	8,598,932

Southern California has 34 per cent. of the area of the State. The assessment in 1880 was 6 per cent. of that of the State—in 1889 it was 20 per cent.—a wonderful growth. Southern California in 1889 has 21 per cent. of the population of the State.

THE CITY.

REPORTS OF MUNICIPAL OFFICERS FOR THE YEAR.

Several Departments—Streets Improved—Sewers Laid—City Schools, Library, Police, Water.

IN spite of the reactionary times, the city of Los Angeles has been experiencing a regular boom in public improvements during the year just closed. It is safe to say that in no three years of its previous existence was so much accomplished in this line. The city has thus been "catching up," so to speak, in its public improvements, and overtaking the expansion of the previous phenomenal years of growth. The reports of municipal officers appended show in detail the work accomplished.

CITY ASSESSMENTS.

As Shown by the Books of the City Assessor.

Value of land.....	\$31,595,082 00
Value of improvements.....	8,850,190 00
Value of personal property.....	3,933,464 00
Money.....	211,387 00
Franchises.....	131,095 00
Improvements assessed to non-owners of realty.....	80,835 00
Deductions for mortgages.....	4,636,010 00
Mortgages assessed.....	4,636,010 00
Total value of all property.....	44,871,073 00
Total value after equalization, 46,977,101 00	
Total tax.....	516,968 00
Rate of assessment.....	1 10

CITY ENGINEER.

Report on Streets, Sewers and Other Improvements.

In pursuance of division 11, section 58, of article 4 of the new charter, I beg leave to present the following as my report:

The charter provides that I shall give a statement of the condition, character and cost of all public work and improvements in course of construction during the year. As it has not been the custom heretofore to make annual reports of work coming under the direction of the Surveyor, I deem it advisable to report on all public works done in the city up to date. This I have done in detail.

I also separate from the report the public work done or under construction during the period that the new charter has been in effect.

GRAVELED STREETS.

There are to date 399,906 lineal feet, or a trifle over 75 miles, of graded and graveled streets within the corporate limits of the city of Los Angeles, and the total sum expended on the same by the city and by private parties is \$1,126,710.

This does not include work accepted since the closing date of this report, such work being reported under the head of "work under contract."

PAVED STREETS.

The first street pavement laid in the city was laid by the city in front of what was formerly the City Hall lot, now the Bryson-Bonebrake block. This pavement has a concrete base with a surface of bituminous lime rock. It was laid during the latter part of 1885.

We have at present 13,500 lineal feet of bituminous lime-rock pavement, concrete base; 11,460 feet loose rock base; 8113 lineal feet of granite block; 1270 lineal feet of asphalt, concrete base; 2121 lineal feet of asphalt, broken rock base, and 3271 lineal feet of porphyry. The total length of paved street is 74 miles; cost, \$375,787.

BRIDGES.

The number of bridges owned by the city and open for traffic is eleven, eight

of which span the Los Angeles River, one the Arroyo Seco and two the Arroyo de los Posas.

The total length of all the bridges, approaches included, is 4175 feet. The total sum expended on them is \$192,261. This amount includes the cost of material and erection, together with the cost of removing and erecting the Ninth-street (formerly First-street) bridge, and the cost of enlarging and raising the Macy-street bridge across the Arroyo de los Posas.

The bridges in detail (the City Engineer's table is more exhaustive than the one here given) are as follows:

NAME	Length, feet	Width, road, feet	Cost
Buena Vista.....	300	20	\$1,000
Downey avenue.....	318	40	57,640
Kuhrt street.....	300	28	16,550
Aliso street.....	300	20	8,000
First street.....	300	40	67,400
Seventh street.....	300	20	
Seventh street—moving.....			3,000
Ninth street.....	300	20	18,000
Ninth street—moving.....	106	18	5,578
Daily street and Arroyo Seco.....	300	20	2,500
Macy street.....	300	20	
Los Posas—raising.....	204	20	1,075
Los Posas.....	70	30	743

LEVEES.

The city has built 2376 feet of levee north of Kuhrt street on the east line of the official bed of the Los Angeles River. It cost \$6.50 per lineal foot, or a total of \$15,432.

A fraction less than 2455 feet of levee has been built south of Aliso street, at a total cost of \$15,957. One-half this cost was paid by the city and one-half by private parties.

The above is all on the east side of the river, and was built during 1887. It has stood two winters, but there has been no severe flood since the work was completed.

The levee is in poor condition between Buena Vista street and Downey avenue and between Downey avenue and Kuhrt street, on the east side of the river. This is now being strengthened by the erection of wings, which will add very materially to the strength of the levee, and if placed close enough together there would be little danger of a washout.

SEWERS.

We have, to date, 110,000 lineal feet, or nearly twenty-one miles of sewers in the city.

Of that there are: Of cement—6174 feet 22-inch; 8317 16-inch; 5391 14-inch; 4977 12-inch; 12,233 10-inch; 10,326 8-inch; 2556 6-inch.

Of vitrified pipe—234 feet of 18-inch; 2831 15-inch; 7848 12-inch; 7904 10-inch; 15,384 8-inch; 9912 6-inch.

Wood—410 feet of 12x12 inches; 415 2x2 inches.

Constructed—999 feet of brick, egg-shaped, 16x24 inches; 3515 feet of 2x3 feet; 2215 feet of 18x24 inches; 650 feet of 3x5 feet, flat bottomed; 1590 feet of 2x3 feet, plank covered; and 6420 feet of 3x4 feet, plank covered.

The California Southern Railroad Company has built a levee on the west side of the official bed of the river from Downey avenue to a point near the south city line. The levee is in a dangerous condition at many points north of First street. The company also encroaches upon the bed of the river some 50 feet at a point between Downey avenue and Kuhrt street.

STORM DRAINS.

There are 21,941 lineal feet, or a trifle over four miles, of storm drains in the city.

Of that amount there are: Cement pipe—9170 feet of 30-inch; 4539 of 22-inch; 2109 of 18-inch; 890 of 16-inch; 680 of 12-inch.

Vitrified pipe—862 feet of 18-inch; 235 feet of 14-inch; 90 feet of 10-inch.

Brick conduit—120 feet of 3x5 feet.

Iron rectangular—75 feet of 12x24 inch.

Concrete and wood—1556 feet of 6x3 feet.

Wood-closed flumes—710 feet of 3x5 feet; 841 feet of 4x4 feet.

The total cost of the above, as nearly as could be obtained, is \$26,105, inclusive of the zanjas used as storm drains.

The following map shows the location of the Zanja Madre and other zanjas used as storm drains, and the storm drains (except one of 30-inch pipe, 500 or 600 feet long, at Westlake Park).

ZANJAS.

There are 15 zanjas, some of them each divided into several sections. The total length of all is 17 miles; cost \$136,977.

SIDEWALKS.

There are in the city 70 miles of cement and asphalt walks and 42 miles of granite and cement curbing, as follows:

Curb—cement, 33 miles; cost, \$59,722; granite, 9 miles; cost, \$44,262.

Walk—cement, 67 miles; cost, \$350,000; asphalt, 8 miles; cost, \$19,000.

As most of the work was done under

private contract, the cost is only closely approximated.

STREETS GRADED
and accepted since March 21, 1889:

By the city:	
Alabama, State to Second.....	\$3,109 11
Ann, Main to eastern terminus.....	1,343 12
Adams, Main to Figueroa.....	3,970 05
Brooklyn, Figueroa to Swift.....	790 52
Castelar, Walters to Alpipe.....	1,607 12
Court, Beaudry avenue to Beau-	
dry street.....	6,081 86
Collado, First to Western avenue	
Daly, Hawkins to Schieffelin.....	432 92
Eighth, Main to Alameda.....	13,731 11
Eleventh, Los Angeles to San	
Pedro.....	3,801 00
Flower, Pico to Twelfth.....	1,203 77
Hope, Fourth to Fifth.....	2,961 83
Hoff, Water to Walnut.....	1,650 76
Hope, Pacheco to Washington.....	999 00
Lucas avenue, Fourth to Diamond	
Laurel, Main to Grand.....	7,229 83
Macy, River to Bridge street.....	2,979 47
Maple avenue, Seventh to Eighth	
Myrtle avenue, Seventh to Eighth	
Ninth, Hope to Grand avenue.....	1,121 71
Ottawa, Pearl to Georgia Bell.....	1,167 19
Seminary, Lucas to Lafayette.....	2,813 27
Sottolo, Temple to Court.....	3,316 53
Sottolo, San Fernando to Main.....	999 48
Seventh, Alameda to the river.....	7,123 95
Twelfth, Main to San Pedro.....	5,309 40
Walnut, Kahrts to Hoff.....	8,299 75
Waters, Temple to Court.....	2,777 85
Water, Downey avenue to Arroyo	
Seco.....	2,620 00
Park View avenue, Seventh to	
Ward.....	4,710 27
Ellis avenue, Figueroa to Tober-	
man.....	3,735 00
York, Main to Figueroa.....	3,034 00

Total (46,196 feet).....\$120,756 02
Or nearly nine miles, of which 3730
(less than one mile) were done by private contract, at a cost of \$7146. All
the other work was done under the
Vrooman Act.

STREET PAVING.
With bituminous limestone:
Franklin, Fort to Spring, concrete
base.....\$ 2,721 52
Fort, Temple to Sixth.....52,740 90
Fifth, Main to Hill.....7,341 83
Fifth, Hill to Olive.....1,857 44
Sonora, Main to New High.....1,322 41
Third, Main to Hill.....11,225 83
Fourth, Main to Hill.....10,182 43
Second, Spring to Mott alley,
north half, concrete base.....1,000 00

Total (8658 feet).....\$ 83,398 39
Broken rock base, when not other-
wise specified.

With porphyry:
Arcadia, Main to Los Angeles.....\$ 1,350 35
Fort, Sixth to Seventh.....4,334 36
Upper Main, Marchessault to Col-
lege.....12,325 29

Total (3270 feet).....\$ 17,940 00
Grand total (11,931 feet).....\$106,338 39
Total length of paving accepted by
the city since March 21, 1889, 15,641
feet, costing \$106,338.39.

SIDEWALK AND CURB.
Laid since March 21, 1889:
Granite curb, 2371 feet, probable
cost.....\$ 1,233 90
Cement curb, 27,556 feet, probable
cost.....9,697 60
Asphalt walk, 530 feet, probable
cost.....635 00
Cement walk, 9395 feet, probable
cost.....11,374 00

Total, 39,353 ft., probable cost, \$22,939 50
It has been impossible to get the
exact cost of sidewalks, as they are
nearly all laid by private contract.

The following work has been done
since the new charter has been in force,
since March 21, 1889:

ZANJAS.
No. 6-1, piped from Aliso street to
First, 1866 feet, with 30-inch cement
pipe, \$2917.92.

Zanja Madre, extended from First to
Zanja No. 4, in Second street, 675.6
feet of brick conduit 4 feet in diameter,
and 555 feet, 4.5 feet in diameter, at
\$4.09 per lineal foot, \$5034.79. Total,
\$7952.71.

STORM DRAINS.
At the junction of Main, Spring and
Ninth streets, 235 feet of 14-inch vitri-
fied pipe, 90 feet of 10-inch same, and
75 feet rectangular iron conduit, \$1154.

Downey avenue, east of the river,
862 feet of 18-inch vitrified pipe for
storm drain; cost about \$300. Total,
\$1954.

Besides, smaller drains, put in in
various localities by the Street Super-
intendent.

SEWERS.
The following have been constructed
and accepted:

Upper Main, Alpine to Alameda, 592 feet, 8-inch pipe.....	\$542 75
Orange, Kip to Farragut, 8-inch, 642 feet.....	690 00
Castelar, Bellevue to Alpine, 8- inch, 1305 feet.....	1,106 75
Rosas, Bellevue to the north, 8- inch, 867 feet.....	950 20
North Philadelphia, Bellevue to Alpipe, 8-inch, 1136 feet.....	1,209 90
South Philadelphia, Bellevue ave- nue southerly, 8-inch, 633 feet.....	740 08
Walters, Buena Vista to Yale, 8- inch, 828 feet.....	919 43
Bernard, Buena Vista to Yale, 8- inch, 740 feet.....	663 66
Ann, Weyse to Main, 8-inch, 580 feet.....	530 00
Buena Vista, Savoy to Solano, 10- inch, 532 feet.....	1,124 51
Buena Vista, Bernard to Savoy, 12-inch, 1463 feet.....	1,838 75

Bellevue, Buena Vista to South Philadelphia, 10-inch, 1364 feet.....	1,754 19
New Main, Alameda to Elmira, 12-inch, 2363 feet.....	2,763 66
New Main, Elmira to Wilhardt, 10-inch, 2201 feet.....	2,311 45

Total length, 15,565 feet, cost, \$10,720 60
To which add \$700, as noted be-
low.....700 00

All the above were constructed under
the Vrooman Act. The cost includes
materials, construction and incidental
expenses, such as engineering, inspect-
ing, etc.

The material used was vitrified, salt-
glazed pipe. The manholes and flush
tanks are constructed of brick and iron.
The head of each of the laterals is pro-
vided with a 150-gallon flush tank.
The cost of flush tanks and manholes
is increased above.

In addition the city has built 242 feet
of 10-inch vitrified sewer-pipe sewer
on Sonora street, and 461 feet of 8-inch
vitrified sewer on Aliso street, at a
cost of about \$700.

BRIDGES.
The following have been completed
and opened to the public: Across the
river:

Downey avenue—Iron and steel,
Pratt truss and deck bridge in three
spans of 100 feet each; iron approaches,
the north one 97 and the south one
345.50 feet in length; roadway 40 feet
wide, and sidewalks 28 feet wide on
each side. Cost, \$57,640.

First street—Similar to the above,
except in length of approaches: east-
ern approach 91 feet; western 597.22 in
length. Cost, \$57,400.

Over the Arroyo de Los Posas, Aliso
street—King post truss bridge, 70 feet
long; cost, \$743. Ten feet in width was
afterward added by the Los Angeles
Cable Company, and at its expense.

Macy street—Raised and enlarged;
cost, \$1075.

Besides these the old covered bridge
was turned over to the city by the
county July 15, 1889, without cost. The
same has since been raised at the east
end to meet the grade of the newly-
graded street; cost, \$275.

Total expenditures on bridge work
since March 21, 1889, \$127,133.

Work under way:
GRADING AND GRAVELING.

Alvarado, Ward to west city line.....	Foot Length	5,425
Aliso, river to Pleasant avenue.....		1,730
Bellevue avenue, Beaudry to Laguna avenue.....		3,885
Bixel, Ward to Arnold.....		1,461
Edgeware road, Carroll avenue to Waters avenue.....		1,080
Farragut, Seventh to Ward.....		1,300
Orange, Kip to Alvarado.....		5,366
Seventh, Park View to Alvarado.....		1,200
Ward, Alvarado to Park View.....		1,175
Arnold, Loma Drive to Columbia.....		284
Calumet avenue, East Edgeware road to Waters.....		573
Fourth, Main to Los Angeles.....		1,105
First, Mott to Evergreen.....		1,105
Flower, from Pine southerly.....		255
Grand avenue, Third to Fourth.....		763
Kollam avenue.....		1,369
Los Angeles, Commercial to Alameda.....		1,049
Loma Drive, Ward to Arch.....		1,049
Lake Shore avenue, Second to Bellevue.....		3,150
Maple avenue, Seventh to Eighth.....		717
Myrtle avenue, Seventh to Eighth.....		685
Rodney avenue, Main to Maple.....		1,040
Third, Bixel to Beaudry.....		1,439
Waters, Temple to Edgeware road.....		1,497
San Pedro, Fifth to Washington.....		4,700
Adams, Main to San Pedro.....		1,839
Second, Belmont to Figueroa.....		2,617
Louisiana avenue, Boyle avenue to Chi- cago street.....		1,638
Total.....	AS AC	

Total.....48,627

PAVING.
New High street is being paved from
Franklin to Temple with bituminous
lime rock (concrete base), 533 feet.

SEWERS.
There are being laid 13,873 feet of
sewers, under ordinance No. 165, in the
College Hill district.

STORM DRAINS.
Twenty-two hundred feet of 30-inch
cement pipe is being laid in Kahrts
street for the purpose of carrying the
storm water from the vicinity of
Kahrts and Walnut streets to the
river.

ZANJAS.
Zanja No. 3 is being piped with 30-
inch cement pipe from Second street
900 feet southerly.

LEVEES.
Seven levee wings are being built
along the east side of the Los Angeles
River, between Kahrts street and
Buena Vista street, at a cost of \$172
each. Since completed.

STREET SUPERINTENDENT.

Report in Detail of the Year's Im-
provements.

The City Superintendent of Streets
reports as follows:

In accordance with section 58, ar-
ticle 13, of the city charter, I herewith
present my annual report from the commencement of my term
of office, viz., March 22, 1889, to date,
being a report of the number of feet of
graded and graveled streets con-
structed, with cost of same; number of
feet of streets paved, together with
cost of same; also the number of feet
of sewers laid, and cost. I also include
the total number of feet graded and
graveled, also paved streets, and the

number of feet of sewers laid and in
use in the city.

I will here state that upon taking
possession of my office I found the
same in a perfect chaotic state, and
was compelled to organize as fast as I
became familiar with the duties.

First—Number of feet of graded and
graveled streets constructed this year,
55,080.73; cost of same, \$133,576.03.

Second—Number of feet of paved
streets, 11,590; cost of same, \$104,637.70;
making a total number of feet paved,
graded and graveled, 66,770.50; cost of
same, \$238,213.73.

Third—Number of feet of sewers
laid, 17,763.50; cost of same, \$20,458.40.

Fourth—Total number of feet of
graded and graveled streets now in the
city, 256,367.73.

Fifth—Total number of paved streets
now in use in the city, 25,926.61.

Sixth—Total number of both graded
and paved streets in the city, 282,294.39
feet.

Seventh—Total number of feet of
sewers now in use in the city, 87,070.50
feet. There is also in course of con-
struction 13,876 feet of sewers that
will be finished soon.

Appended find tabulated statement
of each street graded or paved and
sewers built.
W. E. MORFORD,
Street Superintendent.

STREETS IMPROVED FROM MARCH 21
TO DECEMBER 1, 1889.

Street.	Area.	Improvement.
Arcadia	Main to Los Angeles	Macad.
Fort	Temple to Sixth	Bitumin.
Fifth	Main to Hill	Bitumin.
Fourth	Main to Hill	Bitumin.
Fifth	Hill to Olive	Bitumin.
Fort	Sixth to Seventh	Macad.
Second (N)	Fort to Spring	Graded.
Sonora	Main to New High	Bitumin.
Second (S)	Main to Spring	Bitumin.
Third	Main to Hill	Bitumin.
Upper Main	Marchessault to Alameda	Graded.
Ann	Main to east terminus	Graded.
Alabama	Main to Figueroa	Graded.
Adams	Main to Figueroa	Graded.
Brooklyn	Figueroa to Swift	Graded.
Collado	Diamond to Western	Graded.
Court	Beaudry to Beaudry	Graded.
Castelar	Walters to Alpipe	Graded.
Daly	Hawkins to Schieffelin	Graded.
Daly	Lacy to Swain	Graded.
Eleventh	Los Angeles to S. Pedro	Graded.
Eighth	Main to Alameda	Graded.
Silla	Figueroa to Oberman	Graded.
Estrella	Washington to Killa	Graded.
Flower	Twelfth to Pico	Graded.
Hope	Fourth to Fifth	Graded.
Hill	Pico to California	Graded.
Hope	Pacheco to Washington	Graded.
Hoff	Walnut to Water	Graded.
Heliman	Ducay to Hoff	Graded.
Lucas	Fourth to Diamond	Graded.
Laurel	Main to Grand	Graded.
Lecouvreur	Downey to Hoff	Graded.
Macy	The bridge to Bridge	Graded.
Maple	Seventh to Eighth	Graded.
Myrtle	Seventh to Eighth	Graded.
Ninth	Grand to Hope	Graded.
Ottawa	Pearl to Georgia Bell	Graded.
Patton	Temple to Court	Graded.
Seventh	Alameda to River	Graded.
Calumet	Edgeware road to	Graded.
Santee	Eleventh to Twelfth	Graded.
Sand	Castelar to Pavilion	Graded.
Sottolo	San Fernando to N. Main	Graded.
Sottolo	Lucas to Lucas	Graded.
Twelfth	Main to Los Angeles	Graded.
Third	Temple to Court	Graded.
Water	Downey to Arroyo	Graded.
York	Main to Figueroa	Graded.
Belmont	Second to Silver	Graded.
Park View	First to Belmont	Graded.
Second	Figueroa to Lucas	Graded.
Waters	Temple to Edgeware R'd	Graded.

EXTENT AND COST OF IMPROVEMENT.

NAME OF STREET.	Length feet.	Cost Total	Width of street.
Arcadia.....	214.97	1,280 35	47.77
Fort.....	4,233.80	62,740 90	81.00
Fifth.....	1,901.37	7,341 83	60.00
Fourth.....	1,001.25	10,182 43	40.00
Fifth.....	333.36	1,837 44	60.00
Fort.....	634.23	4,334 36	80.00
Second (N)	339.50	1,029 97	81.00
Sonora.....	74.20	1,322 41	37.33
Second (S)	334.37	1,044 60	60.00
Third.....	1,013.37	11,225 83	60.00
Upper Main.....	2,433.68	12,325 29	63.83
Total paved and graded.....	11,590.61	\$104,637 70	
Ann.....	719.73	1,243 12	60.00
Alabama.....	949.00	3,109 11	51.00
Adams.....	2,358.62	5,970 05	62.50
Brooklyn.....	495.00	790 52	60.00
Collado.....	1,837.58	7,229 83	60.00
Court.....	1,577.00	6,081 86	60.00
Castelar.....	1,607.12	1,607 12	60.00
Daly.....	673.50	432 92	60.00
Daly.....	800.00	1,600 00	76.00
Eleventh.....	1,810.00	3,801 00	60.00
Eighth.....	6,051.41	13,731 11	80.00
Ellis avenue.....	2,490.00	3,735 00	55.00
Estrella avenue.....	1,380.00	3,174 00	60.00
Flower.....	678.00	1,203 77	60.00
Hope.....	645.37	2,961 83	60.00
Hill.....	631.00	1,730 00	60.00
Hoff.....	640.00	1,650 76	60.00
Hill.....	840.00	1,660 76	80.00
Heliman.....	780.00	2,340 00	60.00
Lucas avenue.....	1,700.00	7,229 83	60.00
Laurel.....	1,330.00	2,340 00	60.00
Lecouvreur.....	331.00	840 00	60.00
Macy.....	1,422.80	2,979 47	60.00
Maple.....	742.60	885 10	60.00
Myrtle.....	787.90	1,121 71	60.00
Ninth.....	338.70	546 69	60.00
Ottawa.....	82.40	1,167 19	60.00
Patton.....	905.41	2,316 32	51.00
Seventh.....	3,202.00	7,123 95	60.00
Seminary.....	573.00	2,813 27	60.00
Sand.....	595.20	1,368 96	60.00
Sand.....	516.00	955 24	60.00
Sottolo.....	745.00	999 48	60.00
Silver.....	1,232.40	4,378 26	60.00
Twelfth.....	2,209.59	5,506 48	60.00
Third.....	439.00	1,200 00	60.00
Waters.....	962.80	2,777 85	60.00
Water.....	1,191.00	2,620 00	60.00
York.....	2,570.00	3,064 00	60.00
Belmont.....	768.00	2,688 00	60.00
Park View avenue.....	1,170.50	4,710 27	60.00
First.....	1,470.00	3,822 00	62.50
Second.....	1,380.00	3,168 00	60.00
Waters.....	1,513.30	3,935 96	51.00
Total graded.....	55,080.73	\$133,576 03	
Total both paved and graded.....	66,770.50	\$238,213 73	

SEWERS CONSTRUCTED IN THE CITY
OF LOS ANGELES FROM MARCH 21
TO DECEMBER 1, 1889.

Street.	Area.	Improvement.
Aliso	Los Angeles to Alameda	
Ann	New Main to San Fernando	
Bellevue	Buena Vista to S. Philadelphia	
Bernard	Buena Vista to Yale	
Buena Vista	Bernard to Solano	
Castelar	Alpipe to Bellevue	
Cast-lar	Temple to Rock	
N. Philadelphia	Bellevue to Alpine	
New Main	Alameda to Wilhardt	
Orange	Kip to Farragut	
Rosas	Bellevue to Alpine	
S. Philadelphia	Bellevue to Sand	
Sonora	Fort to New High	
Temple	Fort to Castelar	
Upper Main	Alpipe to Alameda	
Walters	Buena Vista to Yale	

*City work. †Estimated cost.

POLICE.

Report of the Chief of the City Po-
lice Department for 11 Months.

Los Angeles enjoys the benefit of a
most efficient police force. Details are
given from a report presented by the
Chief to the City Council early in De-
cember.

The report shows that the police
force consists of 90 men, exclusive of
the Chief and matron, and the total
number of arrests from January 1st to
November 30th, inclusive, was 3407,
the highest number in any one month
being 535, in February, and the lowest,<

department compares with that of other cities:

CITIES.	Population.	Area in acres.	No. policemen.	No. of acres to each officer.	No. inhabitants to each officer.
New York.....	1,250,000	26,500	3,278	8.10	383.86
Philadelphia.....	1,101,000	30,000	1,664	18.07	662.97
Chicago.....	800,000	23,000	1,145	20.08	698.62
Brooklyn.....	757,000	16,847	928	18.26	815.74
St. Louis.....	440,000	49,000	556	73.07	792.81
Boston.....	425,000	12,680	790	29.97	537.98
Baltimore.....	400,000	10,250	705	33.16	577.63
San Francisco.....	350,000	10,720	475	63.97	734.80
Cincinnati.....	325,000	15,300	414	77.10	785.04
Los Angeles.....	80,000	15,700	200	78.50	400.00

In this connection it may be well to state that the discipline of the force was never better than at the present time, nor the city in better condition from a police standpoint.

PARKS.

Report of the Board of Park Commissioners.

The Park Commissioners report that they assumed control of the parks of this city on their organization, March 23, 1889, and at that time found the Plaza Park and Sixth-street Park open to the public, and considerable progress made in preparing the 50-acre park in East Los Angeles for use as such, and but a commencement made in Westlake Park, several thousand trees set out in Elysian Park, and nothing done with Prospect Park. Since that time the following work has been done:

SIXTH-STREET PARK.

This park, being 600x330 feet, was found admirably kept and in good condition, and a favorite resort for the public. The principal improvements since made have been the setting out of trees and preparing for grass the surrounding sidewalks. The expense of this work and caring for the park has been \$1112.26.

PLAZA PARK.

The Plaza Park, being a circle of 210 feet in diameter, was found beautifully arranged and requiring no additional improvements. It has been kept at a cost of \$381.55.

EAST LOS ANGELES PARK.

The 50-acre park in East Los Angeles was found to have had considerable preliminary work done therein, and the improvements since made consist of grading and graveling the drives and walks and the intervening ground, setting out trees, shrubs and flowers, and preparing lawns ready for the grass. Drives graded, 4100 feet, 36 feet wide; of which 1,900 feet have been graded; paths graded, 1000 feet, 10 feet wide.

In this park is the propagating house for all the parks, the cost of which is not included in the amount herein stated as the expense of the park. It amounts to \$3,694.91.

PROSPECT PARK.

A beautifully-located park in Brooklyn Heights on which nothing has been previously done, and containing two and a half acres and having a small brick-cemented reservoir in its highest elevation.

The ground work of this park has been completed, and consists of the grading and graveling of the walks, the placing of the water pipes, the setting out of necessary trees, shrubs and flowers and the starting of the lawns. Cost of labor and material, \$1,560.20.

WESTLAKE PARK.

This consists of 35 acres, and is surrounded by Seventh street, Park View avenue, Ward and Alvarado streets.

The commissioners found this park commenced, but in such a condition as to require a large expenditure for grading and banking up the shores of the lake, the building of rock-work for tool houses and embankments, the building of bulkhead and the setting in of the necessary waste pipe to drain the lake.

Almost the entire landscaping surrounding the lake, which has some 3000 feet of shore line, and lying between the interior driveway and the lake, is completed and planted out with trees, shrubs, flowers and vines of rare varieties, and a portion of the grass lawn growing. The water pipes are laid and completed inside of the interior driveway and the walks have been graded and gravelled.

The interior driveway has been graded and temporarily curbed and partially gravelled. The sidewalks along Park View avenue have been planted with grevillea and pepper trees, and the ground is being prepared on the park side of Alvarado street.

In consequence of the improvement of this park, the city and property-owners have nearly completed the grading and graveling of the streets surrounding the park, which has greatly added

to its general appearance. Amount expended for labor and material, \$9627.92. A considerable sum has been donated by private parties and expended on this park of which the commission has no record.

ELYSIAN PARK.

This park, comprising over 450 acres of hills and valleys, and the park par excellence of the future, was found much in the state that Nature left it, there being about 35,000 trees—eucalyptus, pepper, pine and cypress—set out and growing therein, and that comprised the extent of improvements so far made.

Since that time there have been set out about 50,000 trees of different varieties, including eucalyptus of 27 varieties; live oak, pine of several varieties, pepper, Monterey cypress—covering an area of nearly 100 acres. These trees have been taken care of, and there has been roughly graded about one-half mile of roadways, to allow water to be hauled to the trees.

Surveys have been made in this park to a limited extent, but a topographical survey should be made so that the park can be intelligently laid out and trees planted in accordance therewith. The cost of labor and materials for this park has been \$3906.30.

CITY HALL PARK.

This is a piece of ground 47x165 feet adjoining the City Hall on Fort street, on which nothing had previously been done. It has lately been graded and drives and walks laid out, it being necessary to fill in the rear of the lot about two feet. The two shadiest corners have been filled with leaf-mold in order to set out ferns therein. This park is now ready for setting out trees, shrubbery, etc., so far as the ground is concerned. The drives and walks, however, should be paved to make the work effective. Cost of labor and material, \$334.75.

NURSERY.

The nursery is in the 50-acre park, and comprises a hot-house 15x50 feet, a lath house 30x50 feet, and 18 washes for hot beds.

There have been two men employed in propagating trees and plants for the several parks and there have been produced 500 boxes of border plants, 10,000 trees and shrubs, 500 palms, and many thousands of other plants and flowers. Total cost for eight months, \$904.05.

RESUME OF EXPENDITURES.

Sixth-street Park.....	\$ 1,112.26
Plaza Park.....	381.55
East Side Park.....	3,694.91
Prospect Park.....	1,560.20
Westlake Park.....	9,627.92
Elysian Park.....	2,906.30
City Hall Park.....	334.75
Nursery.....	904.05
General expenses.....	231.55
Total.....	\$21,833.49

CITY SCHOOLS.

Report of Superintendent Friesner for the School Year.

W. M. Friesner, Superintendent of the Public Schools of Los Angeles, presents his annual report to the Board of Education, of which the following is a synopsis:

At the close of the school year, June 30, 1889, the condition of the schools, in every respect, differs but little from that of the previous years.

The teachers labored faithfully, and performed their allotted work as well as possible under the adverse conditions of short hours and cramped accommodations.

Twenty permanent school-rooms—four on Chestnut street, four on Macy street, four on Tenth street, four on Montgomery street, two on San Pedro street and two on Grafton street—were erected during the year.

Notwithstanding this increase in the number of rooms there were at the close of the year 70 schools on half-day time.

The hope that new buildings might be erected during the summer vacation has not been realized, and now the schools are again in session, with 72 schools on half-day time; seven in ill-suited rented rooms and seven owned by the department, which are worse than the rented rooms, and should be abandoned at the earliest opportunity.

These figures show a necessity for 50 additional school-rooms at this time.

Of the \$200,000 worth of school bonds, voted on the 31st day of August last, \$100,000 worth have been sold, and the money is in the treasury. Needed sites have been selected, and contracts are about to be let for the erection of new buildings and additions to old ones. It is hoped that before the present school year ends every school will be well and comfortably housed and on full-day time.

The Superintendent discusses at some length the question as to whether the schools should be in session nine or ten months of the year, and arrives at the following conclusion:

My experience and observation for 20 years in school work convinces me

that more and better work can be done in nine months per year than in ten. The same work can be done more easily, too, in the shorter time, on the same principle that it is better and wiser to work six days out of seven.

In discussing the selection of teachers he deprecates the many false motives which come in to urge the election of applicants to positions, and he holds that it is better "to harden the heart" to everything except the one question, "Is the applicant a good teacher?"

In anticipation of inquiries, he presents the following information:

Salaries of principals, from \$95 to \$150 per school month; assistants in High School, \$115; other teachers, \$80 per month the first year; after that, \$80, \$85 or \$90, according to ability. Length of school year, nine months, from October 1st to the last of June.

Twenty-five to fifty teachers required annually to fill vacancies and supply new schools. The supply of strictly first-class teachers is not always equal to the demand.

Holders of primary certificates may teach in the first five or primary grades; holders of grammar-grade certificates in the next four, or grammar grades; holders of grammar-school-course certificates in the next three or High School grades. Two years' successful experience, or a Normal School graduate is required to teach in the first grade. One year's successful teaching is required for all other grades.

All certificates are issued by the County Board of Examiners.

In conclusion, Prof. Friesner pays a pleasant compliment to A. E. Baker, who took charge of the schools during October, November and December, 1888, during the absence of the Superintendent in consequence of sickness, and he also thanks all persons in any way connected with the schools who have contributed to their success.

CENSUS MANUALLY REPORT									
No. of white children between 5 and 17 years	No. of Negro, Indian and Chinese children between 5 and 17 years	Total number of children between 5 and 17 years	No. of children between 5 and 17 years of age who have attended public schools during the year	No. of children between 5 and 17 years of age who have attended private schools during the year	No. of children between 5 and 17 years of age who have attended both public and private schools during the year	No. of children between 5 and 17 years of age who have not attended school during the year	No. of children between 5 and 17 years of age who have attended school during the year	Average No. of pupils per school	Cost per capita on average daily attendance
1880	3,175	3,175	41	3,134	3,175	41	3,175	1,229	\$5.10
1881	3,370	3,370	41	3,329	3,370	41	3,370	1,234	\$5.10
1882	4,082	4,082	41	4,041	4,082	41	4,082	1,234	\$5.10
1883	4,576	4,576	41	4,535	4,576	41	4,576	1,234	\$5.10
1884	5,070	5,070	41	5,029	5,070	41	5,070	1,234	\$5.10
1885	5,564	5,564	41	5,523	5,564	41	5,564	1,234	\$5.10
1886	6,058	6,058	41	6,017	6,058	41	6,058	1,234	\$5.10
1887	6,552	6,552	41	6,511	6,552	41	6,552	1,234	\$5.10
1888	7,046	7,046	41	7,005	7,046	41	7,046	1,234	\$5.10
1889	7,540	7,540	41	7,499	7,540	41	7,540	1,234	\$5.10

THE LIBRARY.

Report of the Librarian, Miss T. L. Kelso.

Miss Tessa L. Kelso made the following report to the Trustees of the Public Library December 3d:

I herewith respectfully submit the annual report of the Los Angeles Public Library, which covers a period of eight months, dating from April 1st to December 1, 1889. The income of the library is derived from a "tax levy on all taxable property in the city, not to exceed 5 cents on each \$100 of the value of all real and personal property," and from book-borrowers' dues, at the rate of \$1 per quarter.

Following is a statement of the receipts and expenditures for the period named:

RECEIPTS.	
Balance on hand April 1, 1889.....	\$ 3,594.62
Balance from tax levy of 1889-90.....	288.40
(Transferred April 1, 1889.)	
Received on account of appropriation for fiscal year 1889-90.....	17,036.18
Dues and fines.....	519.26
Total.....	\$21,428.46
EXPENDITURES.	
Books and periodicals.....	\$ 3,540.89
Library expenses.....	2,353.60
Salaries.....	2,632.08
Balance in hands of City Treasurer.....	13,021.89
Total.....	\$21,428.46

The amount apportioned by the City Council for the fiscal year of 1889-90 was

\$18,303.05, of which sum it was conditioned that at least \$10,000 was to be expended for the purchase of books.

The figures showing the usefulness and history of the library are necessarily very incomplete, since three months of the eight were spent in the old quarters, where it was impossible to keep correct records of circulation or attendance, under the system then in use.

Upon removal into the present quarters in the new City Hall the library was closed for a period of two months, during which time the books were cleaned, repaired, counted, classified, numbered, book plates inserted, placed in position, shelf-catalogued in duplicate, and a card catalogue begun.

On Monday, the 2d of September, the new library was opened to the public, completely and elaborately fitted with new furnishings in its mechanical make-up.

The book account is as follows:

Number of volumes in the Library September 2, 1889.....	4,356
Number of volumes added to Library to December 1, 1889.....	4,771
Total.....	11,127
Discarded.....	98
Lost and stolen.....	1-99

Number of volumes in Library December 1, 1889..... 11,028

The large addition to the library during the past three months as shown in the foregoing figures, namely, 4,771 volumes, is being daily supplemented by the arrival of other books purchased by the board.

In all such purchases due regard has been paid to the needs of the library in the different departments of history and travels, biography, literature, fine arts, natural science, philology, fiction, sociology, theology, philosophy and reference, and the fund is being expended in proportion to the importance of the several classes named.

There are 189 periodicals received in the library, which are apportioned as follows: On file in reading rooms..... 73 On file at delivery desk..... 78 For use at home..... 38

The circulation of books and periodicals for the three months from September 2d to December 1st is given below:

	Sept.	Oct.	Nov.	Totals.
Reading-rooms.....	3,418	3,570	4,651	11,639
Home.....	1,416	2,217	2,610	6,243

Totals..... 4,834 5,787 7,261 17,941

In addition to this registered number of applications at the delivery desk, there is an average daily attendance of over 100 readers who make use of the periodicals on file in the reading-rooms, making the total number 29,941, which allowing for natural increase at a moderate estimate of 10 per cent. will give a grand total of 131,740 readers for the year.

In rearranging the library the Dewey system of classification has been very closely followed. The addition of so many new books, making it advisable to publish finding lists, type-written shelf sheets of the different classes were inserted in neat covers, lettered with class and number, e.g., Class 930, "Biography," etc., and have proved to be quite satisfactory as a temporary substitute for the finding list. It has also been the means of impressing the scheme of classification upon the minds of the readers in a remarkable degree; in fact, the use of these sheets, bound in this manner, will be an important training for the intelligent use of the card catalogue.

The circulation of periodicals for home use has proven to be one of the most satisfactory features of the library. First-class periodicals suggesting and creating a demand for a better class of books, and accomplishing much toward counteracting the excessive percentage of fiction read.

The addition of a very complete collection of excellent photographs of famous paintings, sculptures, architectural subjects, etc., promises to become of the highest importance as a part of the education of the pupils of the public schools, aside from the advantages to the general public.

Add to this the library of vocal and instrumental music now being formed, and our community will find in the library a means of culture and convenience that will, in a great measure, compensate for the disadvantage of being so far geographically removed from the great supply centers.

Among the accessions of the library are 1300 volumes of United States public documents, in which there is a rich fund of information bearing upon the interests and history of our section of the country. It is our aim to classify and index these volumes to the degree of usefulness that their importance warrants.

Our reference department has been enriched by the acquisition of very many complete sets of the leading American and English periodicals, which, with Poole's index to the same, alone afford the public a mine of information equal to that of any ordinary reference library.

That our citizens are awakening to the importance of having a good library in their midst is apparent from the interest expressed and in the increased apportionment for its support, and it is regretted that a report at this time can give but a meager idea of how well founded this realization is.

As an evidence of the faithfulness of the staff of employees, I need only draw your attention to the fact that within the past three months 4771 volumes have been added to the library in addition to answering the demands created by thousands of readers.

Water Overseer's Report.

The report of the Water Overseer shows that there are 15 zanjas owned and controlled by the city, aggregating some 75 miles in length, of which about 25 miles are piped, said pipes varying in size from 4-foot brick conduits to 8-inch cement pipes, 22-inch pipes being mostly used for carrying two heads of water. The total revenue from sales of water, etc., during the year was \$11,991.15, divided as follows: Sales of water for irrigating purposes, \$11,083.50; pipe lines for domestic use, \$655; boats on reservoir No. 4, \$20; fishing permits, \$144; cash, \$88.65. The total expense of cleaning and repairing

zanjas during the year was \$10,100.18, but much of this work was for a permanent character, and the system was greatly improved by it and its earning capacity largely increased. The total expense of the Nichols ditch was \$1,598.50, from which there was no revenue, it being kept up for the benefit of the Westlake Park.

Superintendent of Buildings.

The report of the Superintendent of Buildings shows that since the 1st of August last, at which date he entered on the discharge of his duties, up to November 30, 1889, 194 permits were issued, of which 20 were for the removal of old building. The cost of the improvements was \$759,575, and fees collected for issuing permits amounted to \$386.50, which has been turned into the city treasury. The following is a summary for the four months: Total number of building permits issued, 194; total cost of improvements, \$759,575; highest cost of any one building, \$150,000; lowest, \$75; average, \$3915.38; brick buildings, 27 in number, \$530,937; number of frame buildings and repairs to same, 103 in number, \$182,795; highest-priced dwelling, \$11,000; number of cottages costing \$1000 or less, 53.

This department was the latest to come into operation under the new charter, but it has already demonstrated its utility, and promises to become indispensable in the administration of city affairs.

City Attorney's Report.

The report of the City Attorney shows that there were pending in the Superior Courts when the present incumbent came into office six cases against the city, and that 19 new suits have been instituted during the year, together with an abstract giving the character of each suit, and its status before the courts at the present time. Besides this, 1857 cases were prosecuted in the Police Courts, of which 1618 were convicted and 219 dismissed and the defendants discharged. The total number of days of imprisonment for the above convictions was 6228; fines and costs imposed and collected to March 21, 1889, in City Justices' Courts, for violation of the city ordinances, \$1311; fines and costs imposed and collected since March 21, 1889, for all offenses in the Police Court, \$7203.30; total, \$8514.30.

City Clerk's Report.

The report of the City Clerk shows that the number of licenses issued and for what amount, during the year ending November 30, 1889, as follows:

MONTH.	Number.	Amount paid.	Total col.	Total uncol.
1888.				
December..	2,853	\$19,228 00	\$18,577 25	\$650 75
1889.				
January....	2,741	18,328 00	16,721 17	1,606 83
February...	2,731	18,470 00	16,881 50	1,588 50
March.....	2,574	17,750 00	16,138 50	1,611 50
April.....	2,602	16,602 00	16,064 00	538 00
May.....	2,635	17,755 00	15,650 00	2,105 00
June.....	2,528	16,750 00	15,408 00	1,342 00
July.....	2,659	16,215 00	15,538 00	677 00
August....	2,554	16,737 00	16,075 00	662 00
September..	2,482	16,840 00	16,281 00	559 00
October....	2,455	16,141 00	15,549 00	592 00
November..	2,472	16,184 00		

Chief of the Fire Department.

The report of the Chief of the fire department shows that the fire protection system consists of 80 men, seven steam fire engines, eight hose carts, one Hayes hook and ladder extension truck, the Richmond fire alarm system, 12 telephones for fire service, 6000 feet of hose and 29 horses. Since January 1, 1889, there have been 166 fire alarms, as follows: By the Richmond fire alarm system, 102; by telephone, 50; still alarms, 14. The total fire loss for 11 months was \$81,220; the large single fire was the tobacco store of William Liebes & Co., at No. 213 North Los Angeles street, on the 16th of April, when the damage amounted to \$10,000.

City Tax Collector.

The report of the City Tax Collector gives the collections of his office from December 1, 1888, to November 30, 1889, as follows: Total collections for taxes, \$483,714.04; licenses, \$191,779.50; deeds, \$57; dog tax, \$448; advertising delinquent tax list for 1888, \$2107.50; making a grand total for the 12 months of \$678,106.04.

Sealer of Weights and Measures.

The report of the Sealer of Weights and Measures shows collections of \$561.20 as fees from October 1 to November 30, he having entered on the discharge of the duties of his office on the first-named date. This money has been deposited with the City Treasurer, as is shown by receipts on file.

POPULATION AND WEALTH.

Striking Figures and Comparisons from Reports.

The growth of the population of Los Angeles during the past 40 years is marvelous. Here are the figures since 1850:

1850 (Americans).....	30
1861.....	6,500
1870.....	8,000
1880.....	11,183
1885.....	20,500
1886.....	45,000
1887.....	62,000
1888.....	75,000
1889.....	80,000

The figures for 1870 and 1880 are those of the United States census. Those of subsequent years are based on the estimates of water companies, the school census and directory publishers. The directory of Los Angeles, published in the summer of 1888, contained 29,526 names. Multiplying by three, this would give a population of 88,578.

Another estimate: There were registered for the Presidential election in Los Angeles, 14,776 votes. Multiplying this by six—a fair figure—would give 88,656—within a fraction of the same number. Taking a conservative view, it is safe to say that the present population of Los Angeles is not less than 80,000.

The county vote at the Presidential election was 30,336. Calculating this in the same manner, we find the population of the county to be 182,016. We may expect the census of 1890 to give Los Angeles city 100,000 population, and the county over 200,000.

Los Angeles is now far ahead of any other county in the State except San Francisco, in point of valuation of property. Here are the figures for the eight wealthiest counties:

San Francisco.....	291,700,443
Los Angeles.....	81,376,319
Alameda.....	71,896,182
San Jose.....	53,112,662
San Joaquin.....	38,802,606
Sacramento.....	34,469,174
San Diego.....	31,560,913
Sonoma.....	31,232,671

The assessment of Los Angeles city for the present year, after equalization, amounts to \$46,997,101. The bonded indebtedness is \$667,000, and the tax levy \$1.10 on the \$100. The assessment compares with previous years as follows:

Years.	Total Value.
1881-'82.....	\$ 7,627,632
1882-'83.....	9,308,447
1883-'84.....	12,235,053
1884-'85.....	14,721,315
1885-'86.....	16,432,436
1886-'87.....	18,451,525
1887-'88.....	27,803,924
1888-'89.....	39,479,172
1889-'90.....	46,977,101

REALTY AND BUILDINGS.

REVIEW OF THE YEAR'S TRANSACTIONS—COMPARISONS.

Total Sales of the Year—Statistics Furnished by Architects and the Superintendent of Buildings.

REAL estate transactions for the year 1889 show a grand aggregate of over \$35,000,000.

These figures are necessarily approximate, as the table is closed December 20th, in order to insure its publication in this number. While the aggregate of transfers for 1889 is less than 1887 and 1888, it still betokens a healthful activity, and for a county of 150,000 population, would be regarded in most States as phenomenal. The late lamented "boom"—which was nothing more nor less than a speculative craze in real estate—found its climax in July, 1887, in which month the transfers amounted to \$12,071,057! It could not continue longer in this high-pressure principle, and it is well for the country that it did not. Prices had been run up in many cases beyond intrinsic values, and there was less buying for legitimate investment than for speculation.

When the reaction came, those who had been carried away by the furor saw the necessity of getting back to solid business principles. Then began a system of "hedging" that has not been equaled in the history of the country. So skillfully was it accomplished that our real business interests were in no manner crippled. There were very few disastrous failures, even among the most extensive and most reckless real estate operators. Many individuals who had purchased at high prices, depending on quick turns to make payments, lost considerably, but there was not a failure of a single bank or business firm in the city of Los Angeles. One bank in the country which had loaded up too much with real estate and debts went down, but the chances are that, in the settle-

ment of its affairs, it will pay dollar for dollar. There was no panic or collapse of any kind.

There was a considerable recession of prices, most heavily felt on outside lands, where fields had been cut up into streets and 25-foot-front lots with the expectation of making cities out of whole dirt. Inside property in the city of Los Angeles held its own remarkably well, and, in many instances, could be sold today at better prices than it would have commanded in the summer of 1887. In other instances there has been a shading down from 15 to 30 per cent. On the whole, however, there is a fine feeling, and few have sold at reduced values unless compelled to do so by the exigencies of debt. A great spirit of accommodation has been manifested on the part of creditors, and the result has been that many debtors have been enabled to pay their way out with comfortable savings on hand.

The transactions of 1888 were still heavy, by reason of the fact that many "boom" deals were closed up; second and third payments being made, at the end of which the instrument of conveyance was placed on record.

The transactions of 1889, while still less than 1888, indicate a healthy activity, and probably contain more new transactions than the preceding year. It may be said now that real-estate operators are "clothed and in their right mind," and that they buy more for legitimate investment and improvement than ever before. Real estate is found to have a solid substratum of value, after all, and it can now be bought at figures which promise an enhancement return from the investment at once. The present time offers a golden opportunity to secure a desirable foothold in realty, either in the city or country. Prices are really lower in Los Angeles today than in most other cities of the Union of equal size and promise, while the most desirable fruit-growing, farming and villa lands outlying can be had for a little less than intrinsic values.

The transactions of 1889 are as follows:

	Total No.	Normal Conveyances.	Under \$1,000.	Over \$1,000.	Total.
1889.					
January.....	2,002	544	763	735	\$ 3,414,476
February....	1,944	534	684	726	3,975,44
March.....	2,114	520	728	766	3,556,71
April.....	1,906	507	603	646	4,431,159
May.....	1,692	546	558	588	3,357,438
June.....	1,119	594	500	247	1,611,161
July.....	1,436	519	451	466	2,932,952
August.....	1,167	410	389	368	1,839,947
September..	1,145	432	347	366	1,643,709
October....	1,266	472	326	428	1,529,418
November..	1,223	547	341	421	1,538,577
December..	1,182	490	282	410	2,224,116
Totals.....	18,545	6,622	6,111	6,499	\$35,309,463

* Approximated.

COMPARISONS.

Following are the transactions, by months, for the past three years:

Month.	1887.	Amount.	1888.	Amount.	1889.	Amount.
January....	\$4,999,099	\$6,637,526	\$3,414,436			
February...	4,863,057	7,601,829	3,075,774			
March.....	5,234,455	7,589,117	3,556,721			
April.....	7,512,124	5,073,054	4,543,159			
May.....	8,163,327	6,596,145	3,357,453			
June.....	11,491,063	5,234,636	2,470,161			
July.....	12,071,057	4,593,589	2,052,952			
August....	11,505,711	4,044,211	1,839,947			
September..	9,872,948	3,773,074	1,643,709			
October....	8,120,486	3,751,538	1,529,408			
November..	5,519,646	3,415,950	1,536,577			
December..	7,323,220	3,920,486	2,224,116			
Totals.....	\$96,730,193	\$82,813,164	\$35,309,463			

* NOTE.—Approximated.

BUILDINGS.

Concise Statement of the Improvements of 1889.

[Reported by architects, covering the time from January 1st to August 1, 1889, and including structures commenced or completed within that period, additions and improvements, all within limits of Los Angeles city.]

BY KYSER, MORGAN & WALLS, ARCHITECTS.

Mansion house, cor. Ceres and 5th sts., 3-story brick.....	7,000
G. Owens, Bush st., cottage.....	1,500
G. Schroder, Palm st., cottage.....	1,500
Church of the Unity, Fifth st.....	17,000
Capitol Mills, Upper Main st. (additions) — 24 and 26 S. Spring (alterations in stores).....	2,500
T. Goss, 121 S. Main st., 3-story brick.....	11,000
E. Germain, 111 S. Main st., 3-story brick.....	11,000
J. Lang, 115 S. Main st., 3-story brick.....	11,000
H. C. Dillon, residence.....	9,500
E. Germain, S. Los Angeles st., 2-story brick.....	14,000
C. Heliga, Palm st., cottage.....	17,000
E. Germain, Hope and 11th sts., additions, residence.....	5,500
Miss Hammond, Pearl st., residence.....	6,000
W. Wright, Hill st., near 10th, residence.....	2,800
E. Germain, Los Angeles st., Business block, 3 stories.....	38,000
H. Newhall, Dana st., additions.....	1,800
Gus Knecht, Figueroa st., residence.....	8,000
Heliman, Haas & Co. office.....	1,800
County Hospital, executive building.....	9,500
A. Briswalter estate, Memorial Chapel.....	25,000

REPORTED BY J. C. NEWSOM, ARCHITECT.

Elizabeth Chauvin, brick block.....	20,000
A. R. Chipman, residence.....	5,000
B. T. Henry, cottages.....	3,000

T. Rhodes, cottage.....	3,000
M. M. Morrison, residence.....	10,000
John H. Bryan, alterations.....	3,000
C. A. Sumner, residence.....	6,000
George Shulto, residence.....	25,000
J. C. Newsom, residence.....	5,000
M. W. Connor, residence.....	25,000
C. C. Allen, residence.....	5,000
E. R. C. Klocke, residence.....	12,000
J. B. Winston, residence.....	5,000
Edward Hildroth, residence.....	17,500
C. H. Session, residence.....	10,000
S. G. Flemming, residence.....	10,000
T. B. Henry, flats.....	6,500
Thomas Ruddick, residence.....	10,000
Frank Flint, residence.....	5,000
Mrs. McGinnis, residence.....	5,000

REPORTED BY S. L. HAAS, ARCHITECT.

City Hall building, Fort street.....	\$297,000
W. C. T. U. building, Fort street.....	50,000
O. W. Childs, residence.....	15,000
A. V. Eames, store.....	7,000
N. W. Stowell, block.....	40,000
J. J. Thompson, residence.....	2,500
Bethany Presbyterian Church.....	5,000
C. R. Thom, store building.....	7,000
E. E. Galbreth, residence.....	2,500
H. Cohen, residence.....	2,500

REPORTED BY A. M. EDLMAN, ARCHITECT.

O. J. Weil, Main st., bet. 1st and 2d, 3-story brick.....	\$ 24,500
M. A. Newmark, Spring st., alterations, residence.....	1,400
H. Newmark, cor. Eleventh and Hope sts., frame stable.....	4,000
ave., cor. 11th and Grand.....	35,000
Mrs. E. P. Hersey, cor. Diamond and Williams sts., residence.....	1,800
K. Cohn, Agricultural Park lot, double tenement.....	2,000
McLean & Lehman, S. Main st., 2-story brick block.....	18,000
C. B. Pironi, Regent st., near 7th st., 2-cottages.....	2200
Mrs. L. Kallisher, S. Main st., 2-story brick.....	11,000
A. W. Edelman, S. Flower st., near Pico, double tenement.....	8,800
K. Cohn & Co., cor. Alameda and S. Main sts., 3-story brick.....	20,000
M. H. Newmark, Grand ave., near Eleventh st., residence.....	10,500
J. Moiso, N. Main st., 2-story brick.....	10,800
N. Jacoby, Hope st., bet. 7th and 8th, residence.....	8,000
Chas. Jacoby, Hope st., bet. 7th and 8th, residence.....	10,000
C. B. Pironi, cor. 12th st. and Maple ave., alterations, residence.....	600
M. S. Holiman, S. Main st., 1-story brick.....	1,000
H. Silver, Figueroa st., residence.....	12,000
H. Newmark, S. Fort st., alterations.....	600

REPORTED BY BROWN & BRADBEER, ARCHITECTS.

Pico Heights, Rosedale district, school-house.....	\$ 4,500
Boyle Heights, Belvidere district, schoolhouse.....	4,000
R. L. Cases, Newhall st., residence.....	2,100
H. S. Hays, Newhall st., residence.....	2,500
N. L. Wheelock, Newhall st., residence.....	2,110
Wm. J. Archer, Newhall st., residence.....	1,200
Arthur G. Newton, Little Rock ave., residence.....	6,530
Dr. G. H. Weeks, Newton st., residence.....	8,530
C. C. Briggs, Central ave., residence.....	4,480
J. C. Bauna, Central ave., residence.....	2,475
C. D. Dean, Maple ave., residence.....	1,900
A. J. Hechtman, Vernon ave., residence.....	8,100
H. W. Poindexter, cor. Flower and Judson residence.....	3,150
M. C. Westbrook, Ocean View ave., residence.....	2,800
William H. Sneedaker, Manhattan ave., residence.....	3,575
W. A. Taylor, Burlington ave., residence.....	3,375
John Imzariovich, Summit ave., residence.....	3,200
George Bradbeer, King st., residence.....	1,350
Howell & Craig, Los Angeles st., brick block.....	20,000
J. Oddus, Alameda st., brick building.....	5,200
Mr. Botello, Bellevue ave., barn.....	1,000

REPORTED BY W. R. NORTON, ARCHITECT.

Dr. M. L. Moore, near Pearl and 9th sts., residence.....	\$ 6,000
E. B. Miller, Spring, bet. 1st and 2d, 4-story brick.....	60,000
George Cummings, Boyle ave., and 1st st., 4-story brick.....	22,000
Mary A. Wilson, Western tet residence.....	4,500
Mrs. Sherer, San Pedro st., 2-story brick.....	4,400

REPORTED BY DORN & SLOCUM, ARCHITECTS.

S. A. Matterson, California st., flats.....	\$ 9,000
Baker & Meyers, Los Angeles st., warehouse.....	10,000
A. M. Hough, 6th and Hill sts., Hotel Brunswick.....	18,000
John Dunsmoor, Figueroa and York sts., dwelling.....	2,500
W. H. Rhodes, Grand ave., dwelling.....	3,000
W. H. Nisbet, Bellevue ave., dwelling.....	1,400
John P. Culver, Grand ave., dwelling.....	3,000
Frances Bates, Santee st., dwelling.....	3,000

REPORTED BY FRANK J. CAPITAIN, ARCHITECT.

Rev. P. Harnett, Sichel and Baldwin sts., Sacred Heart Church.....	\$ 25,000
Louis Roeder, Spring st., bet. 1st and 2d sts., additions.....	6,000
Louis Mesmer, New United States Hotel, additions.....	2,500
Philadelphia Brewery, Aliso st.....	180,000
Luca Scioch, 1st and San Pedro sts., 2-story brick.....	11,000
Rev. J. T. Hartach, Santee st., bet. 11th and 12th, frame church.....	3,500
Louis Phillips, Phillips block, Spring st., new elevator and repairs.....	9,000
Convent Immaculate Heart, Pico Heights, 3-story brick.....	50,000
Pierre Laroude, cor. of 1st and Spring sts., alterations.....	3,000
J. J. Schuler, Adams st., bet. Figueroa and Grand ave., residence.....	12,000
Frank Sabich, Figueroa, bet. Adams and Ellis ave., stable and carriage-house.....	2,500
Ed McLaughlin, Los Angeles st., bet. Commercial and Aliso, three 3-story stone fronts.....	35,000
R. Jelinek, Ocean ave. and Oak st., residence.....	3,000
P. S. Brosius, 1st and Wellington sts., four 2-story brick buildings.....	11,000
D. Waldron, Laurel and Main sts., residence.....	3,500
T. G. Ryan, Brookhurst, near Anaheim, additions.....	2,000
Chas. Hoffman, 11th and Denver ave., cottage.....	2,000

Los Angeles Cable Railway Company, Grand ave. and 7th, 1st. st., East Side, power-houses.....	125,000
Lewellyn & Garvey, 9th and Spring, block.....	10,000
Charles Duncan, Grand ave. near Pico, residence.....	28,000
J. M. Griffin, 1st. st. near 2d, block.....	10,000
REPORTED BY COSTERSON, ARCHITECT.	
George H. Stewart, Bunker Hill ave., repairs.....	1,500
Mrs. E. Fisher, Bartlett st. N. of Temple, residence.....	1,500
W. S. De Van, Castelar st. N. of Temple, tenement.....	8,000
REPORTED BY HUGH J. TODD, ARCHITECT.	
Mrs. Dancyers, Virginia and Boyle Heights.....	1,150
R. B. YOUNG, ARCHITECT.	
C. Raphael, business block.....	1,000
George W. King, business block.....	1,000
Dr. Walter Lindsey, S. Fort st., business block.....	1,000
H. C. Wiley, S. Fort st., business block.....	1,000
George H. Finney, business block.....	1,000
James B. Lankershim, business block.....	1,000
Thomas Alvarado, residence.....	1,000
A. Klein, residence.....	1,000
Dr. A. S. Shorb, residence.....	1,000
John Hennessey, residence.....	1,000
Frank C. Young, residence.....	1,000
H. E. Kronick, residence.....	1,000
S. C. Brown, 4 flats.....	1,000
J. B. Lankershim, 9 flats.....	1,000
J. B. Lankershim, lodging house.....	1,000
R. B. Young, lodging house.....	1,000
Lindley and Jones, market house.....	1,000
Total of above buildings.....	\$450,000
BUILDING PERMITS.	
[Reported by J. O. Muchmore, City Superintendent of Buildings, covering the period from August 1st to December 15, 1889.]	
Hervey Lindsey, east side Fort, bet. 5th and 6th, brick block.....	\$5,750
Hervey Lindsey, Spring st., bet. Fourth and Fifth, brick block.....	5,750
E. W. Jones, S.E. cor. Second and Hill sts., dwelling.....	1,475
M. Gerhardt, Hill and Pacheco sts., dwelling.....	2,500
W. S. Templeton, Santoe st., bet. Ward and Pine, dwelling.....	900
Eliza Fischer, lot 10, block 12, Beaudry tet., dwelling.....	900
Mrs. C. B. Hickory, No. 326 S. Fort st., brick warehouse.....	600
J. C. Blankinton, Fort st., bet. 4th and 5th, brick office.....	1,500
A. M. Stevens, lots 12 and 13, Requena tet., brick building.....	200
A. E. Chipman, cor. Manhattan and West End aves., dwelling.....	2,825
Henry Martz, Bonafino ave., dwelling, sta., dwelling.....	3,500
M. S. Tyler, cor. Adams and Severance, sta., dwelling.....	3,500
Miss Mar. E. Howes, 117 and 119 S. Spring st., stores.....	10,000
M. M. Morrison, 847 S. Fort st., repair dwelling.....	2,400
P. C. Hores, 62 N. Main st., store front.....	300
Charles Baez, lots 3 and 5, New Dorset tet., dwelling.....	1,115
G. F. Leonard, No. 3 Pennsylvania ave., piazza.....	75
M. H. Williams, No. 15 S. Grand ave., stable.....	525
Julia Collins, Rowland st., near Figueroa, dwelling.....	2,000
Frankenfeld and Bonebrake, cor. Sixth and Fort, stores and hall.....	16,000
A. M. Hawson, Second st., between Main and Spring, stores and offices.....	10,000
H. P. Lamb, 8th st., near Pearl, dwelling.....	950
Mrs. M. A. Noble, Bunker Hill ave., dwelling.....	3,000
Mrs. Hannah Phillips, 6 N. Winston and Los Angeles sts., brick dwelling.....	1,000
W. L. Powell, Brooklyn st., dwelling.....	1,600
Benjamin Wilde, Daly st., near Wells, dwelling.....	1,900
M. F. Woodward, 425 S. Fort st., dwelling.....	500
M. F. Woodward, 425 S. Fort st., rep. barn.....	200
Charles A. Baskerville, 173 Los Angeles st., dwelling.....	2,300
A. L. Ball, Pleasant st., Boyle Heights, dwelling.....	1,700
W. W. Fisher, cor. 1st and Cumming st., plan of mill.....	100
E. A. Martin, 43 Court Circle, dwelling.....	600
E. S. Brown, 1st st., bet. San Pedro and Wilmington sts., stores.....	1,000
John Goodman, cor. 6th and Hope sts., 3 cottages.....	2,700
John Goodman, cor. 6th and Hope sts., addition.....	500
Mary M. McCombs, 131 Pennsylvania ave., Boyle Heights, addition.....	825
Freeman G. Todd, S. Fort st., bet. Adams and Eliza, dwelling.....	2,450
Mrs. Marshall, Azusa st., bet. 2d and San Pedro, dwelling.....	875
J. H. Book, cor. 11th and Burlington sts., dwelling.....	1,000
James H. Lankershim, cor. 7th and York sts., dwelling.....	9,000
J. M. Mon-fie, cor. Adams and Flower sts., dwelling.....	8,975
Fort-street M. E. Church, Fort st., bet. 5th and 6th, dwelling.....	300
B. Saunders, cor. Pico and Hope sts., dwelling.....	6,000
George Cummings, cor. Boyle ave. and First st., stores.....	22,000
T. H. Ward, cor. Virginia and Boyle aves., dwelling.....	1,600
A. W. Bush, No. 39 Buena Vista st., dwelling.....	300
W. W. Fisher, cor. Cummings and First sts., stores.....	600
Dr. A. S. Shorb, cor. San Pedro and Adams sts., dwelling.....	4,900
J. Sumode, Alameda st., addition.....	100
L. A. Land Bureau, Ruth, b. f. 6th and 6th sts., dwelling.....	900
M. Gerkem, S. E. cor. 5th and Earl sts., store.....	1,050
J. Schlesinger, Hill st., bet. 12th and 13th, dwelling.....	4,350
Charles Hoffman, 11th st., dwelling.....	1,750
Mr. Ficker, 912 S. Pearl st., addit on.....	200
George Adalson, Nevada st., bet. 9th and 10th, dwelling.....	1,500
Patrol, No. 43 S. Fort st., kitchen.....	200
C. P. Doland, Bunker Hill, bet. 2d and 3d sts., residence.....	2,800
Josaria, Union, Bellevue ave., dwelling.....	500
Wm. Raymond, Hill st., bet. 5th and 7th, dwellings.....	3,000
M. S. Hellman, Hill st., bet. 11th and 12th, dwellings.....	7,050
J. Goodwin, cor. 6th and Hope sts., stores.....	6,020
L. W. Hellman, 10 N. Main st., repairs.....	100
E. McLaughlin, Los Angeles st., bet. Commerce and Alameda, stores.....	22,000
J. P. Waring, 5th st., stores.....	400
Mrs. M. Smith, Brooklyn st., dwelling.....	1,000
Geo. Mason, Grand ave. and Adams st., dwelling.....	4,000
J. A. Burstein, 14th st., dwell. nr.....	1,000
H. J. Shafer, Hope st., 4 dwellings.....	3,000
W. R. Hughes, Spring st., bet. 5th and 6th, feed store.....	300
Fredericksburg B. & W. Co., New Main st., bottling works.....	2,570
O. W. Childs, cor. Main and 11th sts., dwelling.....	7,100
Henry Ludwig, San Julian st., bet. 8th and 9th, dwelling.....	900
A. M. Holmes, Workman Park, dwelling.....	4,000
J. C. & Francis's Zahn, Spring st., bet. 4th and 5th, brick block.....	100,000
D. H. Ireland, Kinney st., dwelling.....	2,400
H. Z. Osburne, Hope st., bet. 7th and 8th, repair.....	900

be congratulated upon the result of his labors.

Speaking of the construction of the road, Mr. Aug. W. Wright, constructing engineer, says that it presents very many features that make it an exceptional piece of work in its way. All the engineering problems that have met every cable-road builder in the world—and many that had never before been successfully solved—had to be solved. There were four great lines of cable with double tracks and two lesser lines, and upon this system there was every conceivable sort of curve and cable crossing to be overcome. All the lines were double-tracked. The cable road that was to be met and crossed had a prior franchise, and it followed that the new road had to carry its cables under that one in making the crossing.

Going down First street there were four lines of steam railway to be crossed, one of which, at Alameda street, must necessarily be crossed on the level, and then the tracks had to be carried over the Santa Fé rails at First street. The river being met at this point, it was deemed wiser to go over the tracks and the bed of the stream by one immense viaduct, 578 feet in length. The building of that viaduct was of itself a great undertaking, although it had been dwarfed by subsequent efforts in the same line, as you know, but it was successfully concluded, and admirably answers the purpose of its construction.

Another difficulty that was met in the construction of the system consisted in the fact that the space allowed for the passage of the grip was so small, and this was particularly true upon the curves. It was a problem, under the circumstances, to acquire a strong enough hold upon the rope to meet the resistance as the car swung around, but this also was met and overcome, and not a grip has been broken in the time that the line has been operated. A steel grip is used, the result being that there are fewer breakages and that the life of the grip is greatly lengthened.

Upon the entire system there are 48 depression pulleys to hold the cable down, and 60 crown pulleys to raise it, the system being necessary to make the rope run easily in the slot and to enable the gripmen to grasp it without difficulty.

There are curves, the greatest bend of cable road builders, upon every one of the three great viaducts of the system, and, in fact, a very large number of curves in all its parts. This is particularly true upon the section from Seventh street and Grand avenue to the Plaza, there being 12 sharp curves upon that one road.

There are three great viaducts, and, of these, the San Fernando-street viaduct, now just completed, is something unique in its construction. It carries the line, in one great leap over all the yard tracks of the Southern Pacific Railroad Company. The first plans for the structure were made by W. A. Seymour, under Mr. Wright's personal supervision, and were submitted to the most eminent bridge experts in the country, or in the world, for that matter, Mr. Samuel G. Artin, president of Chicago, and Mr. A. Gottlieb, president of the Key-stone Bridge Company, of Chicago. These gentlemen pronounced the structure not strong enough for the purpose, and they submitted plans for a stronger viaduct. The plans from which the structure was built as it stands were drawn by Mr. Samuel G. Artin. The Southern Pacific Company had two tracks upon San Fernando street, and refused to allow the placing of the posts to carry the cable tracks being set between their surface tracks, as that would have thrown the railroad lines out close to the curbstones upon either side.

The city refused to allow the double posts set outside the railway tracks, which would have amounted to a practical blocking up and appropriation of the street for private purposes. The engineers were, therefore, reduced to the necessity of using single posts, and thus have the only instance in the world where a double track is supported upon a single column. In some parts of the New York elevated road a single column carries a single track, but nowhere does it carry two tracks upon the one support. The length of the great viaduct, over all, is 1535 feet. The length of the iron work is 1435 feet, and of the concrete approaches 50 feet each. The height from the ground to the rail level is 25 feet 9 inches. Width between the hand rails is 25 feet. The main posts are 5 feet wide at the ground line and 3 feet 14 inches above the ground. Each main post is 12 feet thick and 22 feet long. There are 19 main posts, each of the weight of 41 tons. The smaller posts are 12 inches square and 20 feet 6 inches long. There are 10 of them, making 20 posts in all. The ruling span is 50 feet, but there are two spans of 55 feet, three of 40 feet, one of 30 feet, and one of 20 feet. The main trusses are of the Warren type, 4 feet deep, and of the weight of 100 pounds per

running foot. The approaches are built of 15 "I" beams, each 25 feet long, and of the weight of 50 pounds per foot. The foundation for each main post is a solid concrete block, 15 feet long, 6 feet wide and 5 feet 6 inches deep. Those for the smaller posts are 3 feet long, 3 feet wide and 3 feet deep. The concrete part of the approaches is 8 feet high at the highest point and 19 feet wide. The grade on the approaches is one foot in 5.7 and upon the main viaduct one in 1.75. There are two curves on the viaduct, each of 60 feet radius to the center line, and at these points there are brace posts to take the strain. Where the curves occur on the viaduct, too, as well as at the approaches, the tracks are carried on double posts. This is merely a precautionary measure.

The Downey-avenue viaduct is precisely like that at First street. It carries the line over the Santa Fé main road and the Los Angeles River.

A difficulty, which is not yet thoroughly overcome, is the disposition of storm water in winter.

Where the city has storm water drains near any part of the system, the company has connected with them, while at other points pipes have been laid under the cable conduits extending out several hundred feet. But with the steep acclivities of the Los Angeles hilly districts, and the immense watersheds draining right down upon the streets on which our tracks are laid, the cable company is practically helpless until the city makes some provision to carry off the storm water. The construction of a cable road requires a continuous opening in either track, the slot through which the grip grasps the cable, and through this slot the storm water pours in a continuous stream, running into the power-house.

It is a mechanical impossibility to operate this system through such floods as that of October 20th last, until some system shall have been devised to prevent the water and the sediment that it carries from running in and stopping the wheels of the machinery.

There are over twenty-one miles of single track on the system. All the material, consisting of iron and steel, was provided by the Pacific Rolling Mills of San Francisco. The cable yokes are placed three and one-half feet apart and weigh 168 pounds each. They are eminently calculated, from their peculiar construction, to stand the immense strain placed upon them. The entire conduit is constructed of Portland cement, of which there were used 36,000 barrels, and nearly 50,000 cubic yards of crushed rock were put in to form the concrete. The result is a roadbed that will last practically for all time. Between the slot and the rails for the entire length of the road the track has been paved with bituminous rock.

The cable company has three large power-houses—at Seventh street and Grand avenue, where the general offices for the operation of the system are, at First and Chicago, on Boyle Heights, and at Downey avenue and Workman street in East Los Angeles. At each of these power houses the machinery is designed to propel four cables. Only two are in operation at any one place, however, save at the Grand avenue power house, from which point three ropes are run. The lengths of the various cables are as follows: From Seventh street and Grand avenue to the Plaza, 16,200 feet; from Seventh and Grand avenue to Jefferson street, 24,000 feet; from Seventh and Grand avenue to Alvarado street, 16,000 feet; from Workman and Downey avenue to the Plaza, 23,600 feet; from Workman and Downey avenue to Pritchard street, 7000 feet; from Boyle Heights to Spring and First streets, 23,200 feet; from First and Chicago streets to Evergreen Cemetery, 7000 feet.

The machinery for operating the road was designed by W. R. Eckart of San Francisco, and possesses some very novel features. The principal of these, and the one effecting the greatest saving, consists in giving motion to the cable-winding drum by means of endless cotton ropes. This connects the forward cable winders, making all of them drivers, and enables the working of the cables at half-shaft length—effecting a great saving in the life of the rope by lessening the wear and tear.

Each power-house is designed to contain four engines, two high and two low pressure, which can be used coupled together or either one separately, as required in working the system. Each power-house contains, also, two 500 horse-power tripod boilers. All the machinery at the power-house at Seventh and Grand avenue was manufactured by Fraser & Chalmers of Chicago, who have done their work excellently, while that at the other two power-houses reflects credit upon its makers, the Risdon Iron Works of San Francisco.

Besides the machinery for operating the road there are at each of the power-houses immense pumps designed to aid

STREET RAILROADS.

GLANCE AT THE CABLE AND HORSE-CAR LINES.

The Los Angeles Cable Company's Magnificent System—Temple-street Cable—A Network of Horse-car Tracks.

VERY few cities in the world are as well supplied with street railroads as Los Angeles.

The following description of the Los Angeles Cable Company's system, completed during the year at an expense of nearly \$2,000,000, is taken from the Street Railway Gazette:

This magnificent system of cable lines has now been completed, and Col. J. C. Robinson, to whose indefatigability and enterprise its splendid success is largely due, is certainly to

fruits and vegetables, and honey in pounds.

From July 15, 1888, to June 30, 1889:	
Oranges.....	33,054,000
Lemons.....	45,000
Other fruits and vegetables.....	22,014,000
Honey.....	1,570,000
Total.....	56,690,000

Southern California Railway Company.

Statement showing number of passengers carried:
For the year ending June 30th..... 932,022

California Central Railway Company.
Statement showing number of passengers in and out of Los Angeles for the year ending December 31, 1889:

Month.....	Number forwarded.....	Number received.....
January.....	25,705	27,469
February.....	24,102	24,102
March.....	23,897	24,870
April.....	23,726	24,091
May.....	22,242	22,607
June.....	20,254	20,827
July.....	24,670	24,662
August.....	21,774	21,173
September.....	22,491	21,800
October.....	17,333	18,270
November.....	14,186	17,640
December.....	18,450	19,950
Total.....	262,580	269,113

Statement showing shipments of dried fruits, wines, liquors, honey, grain and wool by counties during the year 1889:

COMMODITIES IN POUNDS.	Los Angeles County.....	Orange County.....	San Bernardino County.....	San Diego County.....
Dried fruits.....	180,000	163,000	7,940,000	1,490,000
Wines.....	3,980,000	140,000	2,040,000	40,000
Liquors.....	60,000	100,000	490,000	420,000
Honey.....	12,780,000	2,730,000	5,140,000	16,760,000
Grain.....	518,000	586,000	236,000	992,000
Wool.....	17,518,000	3,706,000	15,846,000	19,092,000
Total.....	37,956,000	5,575,000	27,652,000	22,704,000

Wells, Fargo & Co.'s Express.
Through the courtesy of Mr. Butler, agent in this city, THE TIMES is furnished with the following recapitulation of express business transacted through the Los Angeles office:

No. pounds freight traffic, 1888.....	1,350,000
No. pounds freight traffic, 1889.....	3,279,845
No. pounds freight traffic, 1888.....	4,464,400
No. pounds freight traffic, 1889.....	6,851,011
No. pounds freight traffic, 1888.....	7,150,104
No. of men employed at Los Angeles, 1888.....	14
No. of men employed at Los Angeles, 1889.....	31
No. of men employed at Los Angeles, 1888.....	44
No. of men employed at Los Angeles, 1889.....	40
No. messengers en route, 1887.....	7
No. messengers en route, 1888.....	7
No. messengers en route, 1889.....	32
No. messengers en route, 1888.....	46
No. messengers en route, 1889.....	56
No. express trains daily, 1888.....	10
No. express trains daily, 1889.....	16
No. express trains daily, 1888.....	32
No. express trains daily, 1889.....	50
No. express trains daily, 1888.....	56
No. wagons in use, 1888.....	4
No. wagons in use, 1889.....	7
No. wagons in use, 1888.....	11
No. wagons in use, 1889.....	11
No. wagons in use, 1888.....	11
No. wagons in use, 1889.....	11
No. wagons in use, 1888.....	11
No. wagons in use, 1889.....	11

Commerce.
The local office of the Pacific Coast Steamship Company furnishes the following statistics:

Freight landed at San Pedro, Dec. 1, '88, to Dec. 1, '89, lbs.....	62,132,474
Freight landed at Redondo, July 1, '89, to Dec. 1, '89, lbs.....	5,112,395
Freight taken from San Pedro, Dec. 1, '88, to Dec. 1, '89.....	13,781,283
Passengers landed at San Pedro, Dec. 1, '88, to Dec. 1, '89.....	5,529
Passengers landed at Redondo, July 1, '89, to Dec. 1, '89.....	400
Passengers taken from San Pedro, Dec. 1, '88, to Dec. 1, '89.....	9,581
Passenger steamers at San Pedro going north, Dec. 1, '88, to Dec. 1, '89, trips.....	124
Passenger steamers at San Pedro going south, Dec. 1, '88, to Dec. 1, '89, trips.....	91
Passenger steamers at Redondo, July 1, '89, to Dec. 1, '89, trips.....	31
Freight steamers at Redondo, July 1, '89, to Dec. 1, '89, trips.....	14
Freight steamers at San Pedro, Dec. 1, '88, to Dec. 1, '89.....	49

TELEGRAPH.
The Western Union and the Postal Telegraph Company.

Within the past year a new wire has been constructed by this company from San Francisco to El Paso, Tex., and a new line has been extended from this city to Santa Monica. There are in Los Angeles the main office corner Main and Court streets, and nine branches. Statistics as to amount of business transacted are not available.

POSTAL TELEGRAPH COMPANY.
An office of this company has been established in Los Angeles within the past year under the superintendence of R. R. Haines, an old time telegraph manager. The company is enterprising and reliable and is reaching out for its share of business.

PACIFIC POSTAL TELEGRAPH-CABLE COMPANY.
The telegraph line of the company with the above long title is one of the acquisitions to this growing metropolis within the past year, and has been quite warmly welcomed by many people. The officers of the company are: J. W. Mackay, the well-known millionaire, president; M. C. Van Horne,

a prominent telegraph man, as vice-president; Charles R. Hosmer, another prominent telegrapher, as general manager, and L. M. Storrer, for many years cashier of the Western Union Company at San Francisco, as District Superintendent. The local management here is in the hands of R. R. Haines, with headquarters at 19 West First street. The company has a business capacity of six wires running from this city through the center of the State, connecting with all the principal business cities of Central and Northern California, Oregon, Washington and British Columbia, thence eastward by the Canadian Pacific Railroad, and connecting en route with the States of the great West by branch lines, and from Montreal with all of the commercial centers of the Central and Eastern States. A prominent feature in this company's programme is its special and immediate connection with the Commercial Cable Company (the Mackay-Bennett system) for all parts of the world enjoying telegraphic communications.

The Pacific Postal system covers two-thirds of the telegraph field of the country through alliances with eastern companies that have been enabled to survive the opposition of the Western Union, notably the American Rapid, the Bankers and Merchants', and the Commercial Telegraph Companies. At present the wires are being rapidly extended from Kansas City southerly and westerly, \$1,500,000 being the estimated cost of construction of lines now in hand, and which will reach the Pacific Coast, giving the company a second outlet for its business with the great East. A party is now in the field working eastward from this city, and will soon establish a wholesome competition in the telegraph business of the towns now making Los Angeles their commercial and social center.

Telephone.
The Telephone Exchange of Los Angeles was organized in 1882, with seven subscribers, and the patronage has steadily increased until there are now 1050 telephones in use in the city of Los Angeles, and some 150 more in the smaller towns of this county. Every town in the county is connected with this city by telephone. The annexed table shows the number of telephones in use in some of the principal cities of California:

San Francisco.....	2,500
Los Angeles.....	1,500
Oakland.....	500
Sacramento.....	200
San Jose.....	125
Pasadena.....	75

FEDERAL MATTERS.

REPORTS FROM VARIOUS GOVERNMENT OFFICES.
Military Department of Arizona—Internal Revenue—Postoffice—Soldiers' Home—Signal Service Report.

MILITARY MATTERS.
Military matters command much attention in Los Angeles. Following are statistics obtained from Headquarters of the Department of Arizona:

The military division of the Pacific includes the departments of "The Columbia," "California" and "Arizona," with one general officer in command of each, and the necessary staff officers and clerical force at his headquarters, to administer the affairs of his department and keep the command supplied.

The President of the United States, recognizing in 1886 the natural advantages which Los Angeles, with its transportation facilities and varied industries, possessed as a great and growing commercial center, from which the troops stationed in the Southwest could be readily operated and economically supplied, added Southern California to the Department of Arizona, and established headquarters at Los Angeles. This change brought about to our city the commanding general, his staff officers and the necessary clerical force to conduct the military operations of the department; in all, about fifty people, many of whom have families.

The command of the Military Department of Arizona includes the Fourth, Sixth and Tenth cavalry regiments; and the Ninth, Tenth and Twenty-fourth regiments of infantry, aggregating 4000 men, stationed at the various forts within the limits of the department, which extends from Texas and the Indian Territory on the east, to the Pacific Ocean on the west; and from Colorado, Utah and Nevada on the north, to the boundary line separating the United States from Mexico on the south.

Many of the articles consumed by this command are advertised for, and

procured under contract in Los Angeles, necessitating disbursements there for transportation and supplies, including subsistence, clothing, fuel, forage, stationery, cavalry horses, draft animals, building and plumbing materials, hardware, machinery and miscellaneous articles, aggregating annually more than \$1,200,000, in addition to the amount required to pay the troops.

Col. B. H. Grierson, Brevet Major-General, is in command of the department. His personal staff consists of First Lieut. C. H. Grierson, Acting Aide-de-Camp; Second Lieut. J. A. Perry, Acting Aide-de-Camp. The department staff is as follows: Maj. W. J. Volkmar, Adjutant-General's department, Assistant Adjutant General.

Lieut.-Col. R. H. Hall, Sixth Infantry, Acting Inspector General. Capt. H. K. Bailey, Acting Judge Advocate, and in charge of the engineer office.

Maj. A. S. Kimball, Quartermaster, Chief Quartermaster. Capt. C. A. Booth, Assistant Quartermaster, Assistant to the Chief Quartermaster.

Capt. W. A. Elderkin, Commissary of Subsistence, Brevet Major, U.S.A., Chief Commissary of Subsistence. Lieut.-Col. J. R. Smith, Surgeon, Brevet Colonel, U.S.A., Medical Director.

Maj. G. E. Glenn, Paymaster, Chief Paymaster.

First Lieut. T. J. Clay, Tenth Infantry, Inspector Small-arms Practice, and Acting Ordnance Officer.

The troops are stationed as follows: Fourth Cavalry, headquarters and Companies E and L at Fort Lowell, Ariz.; Companies A, F, I and M at Fort Huachuca, Ariz.; Companies C and H at Fort Bowie, Ariz.; Company D at Fort McDowell, Ariz.; Company G at San Carlos, Ariz.; Company K at Fort Verde, Ariz.

Sixth Cavalry, headquarters and Companies A, C, H, I and K at Fort Wingate, N. M.; Companies D and L at Fort Stanton, N. M.

Tenth Cavalry, headquarters and Companies A, B, H and I at Fort Apache, Ariz.; Companies C, F and G at Fort Grant, Ariz.; Companies I, L and M at Fort Bayard, N. M.; Company E at San Carlos, Ariz.; Company K at Fort Thomas, Ariz.

Ninth Infantry, headquarters and Companies B, C, F and I at Whipple Barracks, Ariz.; Company A at Fort Mojave, Ariz.; Company D at Fort McDowell, Ariz.; Company E at San Diego Barracks, Cal.; Company G at Fort Huachuca, Ariz.; Company H at Fort Verde, Ariz.; and Company K at Fort Wingate, N. M.

Tenth Infantry, headquarters and Companies D, F and I at Fort Miley, N. M.; Company B at Fort Stanton, N. M.; Companies C and H at Fort Union, N. M.

Twenty-fourth Infantry, headquarters and Companies A, D and F at Fort Bryard, N. M.; Companies B, C, E and K at Fort Grant, N. M.; Companies G and H at San Carlos, Ariz.; and Company I at Fort Thomas, Ariz. Indian scouts are stationed as follows: Company A at San Carlos; Company B at Fort Wingate; Companies E and F at Fort Apache. Total number, 145.

NATIONAL GUARD.

What It Consists Of and How Organized.

The First Brigade N.C.G., with headquarters in Los Angeles, consists of 12 companies, distributed as follows: Three companies in Los Angeles, two in San Diego and one each in Ventura, Pasadena, Pomona, San Bernardino, Riverside, Anaheim and Santa Ana. Brig.-Gen. E. P. Johnson commanding. Lieut.-Col. L. S. Butler, A.A.G.; Lieut.-Col. W. S. Cochran, surgeon; Maj. C. C. Allen, inspector; Maj. E. L. Stern, ordnance officer; Maj. George H. Bonebrake, paymaster; Maj. A. W. Barrett, quartermaster; Maj. G. Wiley Wells, judge advocate; Maj. Cyrus Willard, engineer officer; Maj. H. M. Russell, inspector of rifle practice; Maj. M. T. Owen, signal officer; Maj. George M. Dannels, commissary, and Capt. H. Z. Osborne and A. C. Jones, aide-de-camps. There are two regiments of six companies each, the Seventh in Los Angeles, and the Ninth not yet mustered. The annual allowance to each company is about \$1750. This money goes to the companies direct, and is disbursed for rent of armories and other expenses.

The officers of the regiments consist of one colonel, lieutenant-colonel, major, adjutant, surgeon, quartermaster, commissary, inspector rifle practice, ordnance officer and chaplain each, and about 800 men.

The Signal Corps, under command of Maj. Owen, consists of 10 men from each regiment.

The brigade held its first encampment at Pacific Beach, near San Diego, in August last, the expenses of which were defrayed by the State. The Governor and Adj.-Gen. Orton were present,

and expressed much satisfaction at the general appearance of the brigade in general orders.

FOR THE VETERANS.

The Pacific Branch National Home for Disabled Soldiers.

The officers and non-commissioned officers are:

Governor, Col. Charles Treichel. Treasurer, Maj. Adolph Erdman. Surgeon, Maj. Herman E. Hasse. Sergeant-Major, John C. Morris, late Company A, One Hundred and Eighty-first Ohio Infantry. Quartermaster Sergeant, George E. Wise, late Acting Ensign, United States Navy.

Commissary Sergeant, William R. Roberts, late Company K, Twenty-eighth Illinois Infantry.

Dining-room Sergeant, William W. Owens, late Company C, Seventh California Infantry.

Sergeant of the Guard, John H. Rice, late United States Navy.

Chief Bugler, Alpha Obeks, late Company F, One Hundred and Forty-second Illinois Infantry.

Sergeant of a Company, J. N. Armstrong, late Company A, Gray's Battery.

Sergeant of B Company, Samuel B. McCall, late Company E, Third Iowa Infantry.

Sergeant of C Company, William B. Clothier, late Company E, Fourth California Infantry.

Sergeant of D Company, Madison W. Criss, late Company I, Eighty-eighth Indiana Infantry.

No members present, 414; members on furlough, 89.

This home is situated in Los Angeles county, about three miles from Santa Monica. It commands a magnificent view of the ocean in front, and of the mountains in the rear.

The first two barracks were not completed until the middle of March last, and before the end of that month they were fully occupied. Previous to that time nearly one hundred old soldiers were being cared for as well as circumstances would permit in a temporary building which had been hastily improvised for the purpose. By the end of June two more barracks were completed, and these also were soon filled.

These buildings are designed for 100 men each, but no old soldier has ever yet been turned away because the home was full, and they are now overcrowded.

The buildings thus far erected are: Four barracks, a temporary but ample and comfortable dining-room, a kitchen with all the latest and most approved appliances for cooking, and recently a bakery. Also a carpenter shop, paint shop, work rooms for tailor, saddler, shoemaker, tinsmith, plumber, blacksmith, engineer, machinist, etc.

An ample supply of pure and wholesome water is assured. It is brought to the home in pipes from a spring in the cañon, a distance of over five miles. In connection with this work a service reservoir has been built with a capacity of 400,000 gallons. It is also the intention to build a storage reservoir to hold 200,000,000 gallons.

On the 30th of June last the general work of construction was necessarily suspended, no further appropriation for that purpose having been made by Congress. Some wants, however, which are considered absolutely indispensable, will be supplied without waiting for the next appropriation. A building for postoffice and store is almost completed. A library will be commenced immediately. The building for this purpose will be used for post and other society meetings, and also for religious services.

While members of the home are not required to work, they are encouraged to do so, and are given the preference in every case, provided they are physically and otherwise able. The rate of pay is uniform at all the National Homes, and is fixed by the Board of Managers. In the month of November there were 140 names on the pay rolls; of these all but 12 are members of the home.

The work thus far accomplished has necessarily been confined to providing those things which were actually necessary for the comfort and health of the members. Their amusement and pleasure will be the next consideration.

INTERNAL REVENUE.

Details of the Collections at the Los Angeles Office.

Guy B. Barham, deputy collector of internal revenue for the First District of California at Los Angeles, gives the following figures of transactions of his office from November 1, 1888, to November 1, 1889. This does not include penalties or amounts paid in settlement of seizures, which are remitted directly to the collector in San Francisco. These amounts do not cover immense quantities of brandy made here and shipped in bond to other dis-

tricts. These are therefore the local collections of Los Angeles:

Tax paid stamps sold.....	\$98,232 89
Beer stamp sold.....	12,357 26
Cigar stamps sold.....	7,732 39
Special tax stamps sold.....	29,518 68

Total.....\$147,841 00

The Government tax on spirits is 90 cent per gallon, which, calculating from the amount of tax-paid stamps above given, would make the local manufacture of spirits upon which tax was paid at this office 109,170 gallons. The principal part of the brandy manufactured here is sent away in bond.

The tax on beer is \$1 per barrel of 31 gallons, and the same calculation on beer stamps would show the local manufacture of beer to be 12,375 barrels or 388,074 gallons. This is by one firm, Maier & Zobelein.

The tax on cigars is 30 cents per 100, and the stamps sold show the local manufacture to be 2,584,100.

UNITED STATES LAND OFFICE.

Resume of the Business for the Year 1889.

United States Register Polk furnishes the following:

With this I beg to hand you a statement of the business transacted in this office during the current year, up to December 17, 1889, and from which it will be seen that the total number of acres sold was 161,444.56, and the amount of money received therefor, and also the other various accounts mentioned in the statement, was \$98,784.89.

This includes all the business that was transacted for the time mentioned from which the Government derived a revenue.

In addition to the above transactions, there were filed, during the year 1889, 388 affidavits of contest; 81 cases were heard in which both parties appeared, and 70 cases in which default was made and ex parte testimony taken. There were more than 100 decisions rendered, some of them in cases that had been heard during the previous year.

As will be seen from the foregoing, a great deal of the work of this office is on contest business, and, by reference to our docket, we find that there is a case set for every day to March 2, 1890. Very respectfully,

I. H. POLK.

Statement of business transacted in the United States Land Office at Los Angeles, Cal., during the year 1889:

	Acres.	Amount.
221 preemption entries.....	29,058 73	\$45,484 20
119 commuted homestead entries.....	16,278 30	27,255 98
30 excesses.....	648 07	887 57
24 sales timber land.....	2,331 63	5,568 82
21 sales mineral land.....	1,371 75	2,285 60
30 sales desert land.....	4,309 22	2,190 19
444 homestead entries.....	63,815 61	7,738 60
137 final homesteads.....	20,499 23	1,365 70
179 timber culture entries.....	23,407 82	2,266 00
82 preemption declarations.....		1,049 00
9 homestead declarations.....		27 00
19 mining applications.....		191 00
24 timber applications.....		240 00
Timber declarations.....		40 00
3 coal land declarations.....		9 00
3 military bounty land.....		12 00
3 warrant locations.....		30 00
3 mining protests.....		36 00
16 state selections.....		75 30
8 railroad selections.....		815 93
due to testimony to writing.....		
Totals.....	161,444 56	\$98,784 89

I. H. POLK, Receiver.

THE POSTOFFICE.

Immense Business—Striking Increase Over 1889.

The receipts of the postoffice for 1889 amount to nearly \$20,000, being an exceptionally large increase over the previous year.

During the past year the office has received and dispatched over 550 sacks and pouches of mail daily, equal to 16,000 a month, and amounting to 192,000 sacks and pouches of mail received and dispatched during the year. Averaging each sack and pouch at 40 pounds the amount of mail handled would be equal to 3840 tons.

Upwards of \$1,000,000 has been handled in the money order branch. Twenty-five thousand money orders and 9000 postal notes were issued and a much larger amount paid.

In the registry branch 16,122 letters and 3890 packages have been registered, and 21,248 registered letters and packages delivered.

Following is a comparative statement of deliveries by carriers of the Los Angeles postoffice for 1888 and 1889:

	Year ending, Nov. 30, '88.	Year ending, Nov. 30, '89.
Registered letters.....	6,715	12,520
Letters.....	2,533,879	3,243,864
Postal cards.....	234,737	341,813
Newspapers, circulars, etc.....	1,877,063	2,194,376
Totals.....	4,654,394	6,792,579
Total pieces mail delivered by carrier, year ending Nov. 30, 1889.....		5,792,579
Total pieces mail delivered by carrier, year ending Nov. 30, 1888.....		4,654,394
Total increase of pieces delivered.....		1,138,185

Collections by carriers of the Los Angeles postoffice:

	Year ending, Nov. 30, '88.	Year ending, Nov. 30, '89.
Letters.....	2,533,879	3,243,864
Postal cards.....	234,737	341,813
Newspapers.....	202,439	273,977

Totals.....3,409,684

Total pieces mail collected, year ending Nov. 30, 1889.....4,216,765

Total pieces mail collected, year ending Nov. 30, 1888.....3,409,684

Total increase of pieces collected.....816,081

Total pieces of mail handled by carriers in 1889.....13,009,341

Total pieces of mail handled by carriers in 1888.....8,055,078

Total increase of pieces handled over 1888.....4,954,263

MARITIME.

Report from the Collector of the Port of Wilmington.

Report of the Port of Wilmington, Cal., for the year December 1, 1888, to December 1, 1889.

Arrivals:

Steamers, number.....	478
Schooners, number.....	99
Ships, number.....	38
Barks, number.....	14
Barkentines, number.....	6
Brigs, number.....	3

Total.....638

Domestic tonnage, tons.....441,753

Foreign tonnage, tons.....47,747

Total.....489,500

Imports:

Lumber, feet.....48,924,070

Coal, tons.....73,011

Merchandise, tons.....29,693

Tees (railroad), tons.....962,550

Coke, tons.....250

Caustic soda, tons.....22

Live stock, head.....3,740

Exports—all domestic, no record.

Collections for year, \$58,660.23.

EDUCATIONAL.

CHURCH AND PRIVATE INSTITUTIONS OF LEARNING.

University of Southern California—St. Vincent's—Los Angeles College—Harvard Academy—Baptist College, Etc.

LOS ANGELES has, in addition to the comprehensive system of public schools (referred to elsewhere), a number of educational institutions under church patronage and private, of which the people may well feel proud. They are here briefly described:

The following is a brief outline of the University of Southern California: Rev. M. M. Bovard, D.D., president. This institution is under the patronage of the Methodist Episcopal Church. It has several colleges already in operation, each largely endowed, and several others projected, endowments in part provided for.

Of the colleges of the University now in operation the following may be briefly mentioned:

College of Liberal Arts, located at University Place, West Los Angeles, Rev. F. B. Cherington, D.D., dean, supported by a large and efficient faculty. Two large, commodious and elegant buildings, free of debt, are occupied by it.

The College of Medicine, located on Aliso street, J. P. Widney, M.D., dean, aided by a large and finely-equipped faculty. The building is large and well adapted to the wants of the institution, and is free of debt.

College of Theology, located at San Fernando, Rev. R. S. Maclay, D.D., dean, aided by an able faculty. The building is a fine one, the gift, free of incumbrance, of Senator Charles Maclay, who also gave the large land endowment which supports the college.

College of Agriculture, located at Ontario, W. S. Randall, Dean, with a strong faculty. The building is large, well-arranged and free of debt.

The seminary at Escondido opened October 1st, with Prof. C. A. Weaver and Prof. J. A. Morrison in charge. The school occupies a fine, large building free of debt.

Each of these five colleges has a good attendance and is in a flourishing condition.

ST. VINCENT'S

Catholic College for Boys and Young Men.

This institution, located on Grand avenue and Washington street, is a boarding and day school for boys and young men.

It was founded in 1867, and received its charter in the year following. Its first site was on Sixth street. Now it is centrally located in the residence portion of the city, within easy access by street cars from any point, the new cable line passing the entrance on Grand avenue, and the Main-street line on Washington street, making it

convenient for day scholars from all parts of the city.

The buildings are large, its halls and dormitories lofty and spacious. The campus is extensive and furnishes abundant space for games and outdoor recreation. The institution is furnished with all modern conveniences, calculated to make the students feel at home and contented. Every effort is made to insure progress in studies. The system is simple, opposed to cramming the mind with useless or merely nominal branches.

The course is collegiate and commercial.

The collegiate course embraces English grammar, rhetoric, composition, history (ancient and modern), education, geography, arithmetic, algebra, geometry, trigonometry, surveying, differential and integral calculus, chemistry, natural philosophy, astronomy, logic and metaphysics, Latin and Greek. The Spanish, French and German languages are optional.

In the commercial course, besides the English language, arithmetic, geography and elocution, particular attention is given to commercial law and book-keeping in its various branches. Students who have completed the collegiate course in a satisfactory manner are entitled to the degree of bachelor of arts; and, after spending two years in the pursuit of scientific or literary studies, they can receive the degree of master of arts.

Commercial diplomas are awarded to the students of the commercial department on the satisfactory completion of their course.

The college, though presided over by Catholic priests, opens its halls to all, without distinction of creed. Whilst students professing the Catholic religion are instructed in that faith and exhorted to live according to its dictates, the religious convictions of non-Catholic students are never interfered with. A most strict and watchful care is bestowed on the moral training of the students. No offense against morality, in word or deed, is tolerated; the use of liquors and tobacco is strictly forbidden; offenders in this respect are liable to be dismissed; obedience to rule and authority is strictly enforced. The officers of the present term are:

Very Rev. A. J. Meyer, C.M., president and professor of Latin and German.

Rev. M. Dyer, C.M., professor of logic and metaphysics and higher mathematics.

Rev. L. P. Laury, C.M., professor of chemistry, physics, French and arithmetic.

Rev. J. J. Murray, C.M., professor of rhetoric, history, elocution and book-keeping.

Rev. J. E. A. Linn, C.M., professor of mathematics, Latin and English.

Rev. H. I. Dockery, C.M., professor of commercial law, banking, arithmetic, stenography and Spanish.

Rev. M. J. Brennan, C.M., professor of mathematics, Latin, Greek and English branches.

F. McNeil, C.M., professor of Latin and Greek.

J. Murphy is in charge of the primary class.

Prof. T. Wilde teaches piano and organ.

Prof. J. Gardner teaches the violin and other string instruments.

LOS ANGELES COLLEGE.

A Seminary for Girls and Young Ladies.

The preliminary steps for the organization of a Christian school in this city, for the higher education of girls and young women, were taken in June, 1885. It was the design of the organizers to establish such a college as would afford for the Southern Pacific Coast a course of instruction for young women equal to that of the leading colleges in the East.

The institution was made non-sectarian, though preëminently Christian. It is under the control of a board of trustees, elected without regard to church connection. The college was chartered under the laws of the State of California, with full power to confer degrees, and it was formally opened on the second day of September, 1885, in a building erected for its temporary accommodation, near the corner of Fifth and Olive streets.

The growth of the school was rapid, and though many additions were made to the buildings, it was soon found that they could not be arranged so as to accommodate the numbers applying for admission. It was therefore necessary that a more commodious structure should be erected. Stock was subscribed by a number of our citizens, and the present location, corner Eighth and Hope streets, was selected.

During the fall and winter of 1887 and 1888 a building 90 feet by 140 feet, was erected, costing over \$60,000.

It is in the form of a hollow square. The court is 45 by 70 feet. Two large skylights, containing over 800 feet of glass, flood it with light and sunshine. It forms a delightful place for exercise,

for the regular gymnastic drills, and for the musical and literary entertainments.

Around the court and opening into it are the assembly-room, recitation-rooms and school halls. These are large and airy, and are adapted in every way to the purpose for which they are used.

The bedrooms are 22 feet long by 12 feet wide.

The building is heated by steam, with a radiator in each room, and is lighted throughout by the Edison incandescent electric light.

Complete philosophical apparatus enables instructors to give all the experiments usual in the study of physics. The study of physiology is pursued with the aid of a skeleton, manikin, and dissection of the different organs of the lower animals.

A chemical laboratory enables the pupil to master the study of chemistry by the aid of practical experiments.

When practicable the classes are taken to visit and see for themselves the application of the principles of science in the manufacture of things of daily life.

There are 302 pupils in attendance.

The faculty is as follows: Rev. D. W. Hanna, A.M., president, mental and natural sciences; Alice M. Broadwell, lady principal, history; Christine Moodie, literature and rhetoric; Mary C. Noyes, A.M., mathematics; Amy Saxton, assistant mathematics; Mary A. Roe, zoölogy and geology; Rev. J. C. Nevin, botany; Linda Carver, principal preparatory department; Laura Moore, primary department; Lucy S. Hanna, secretary. Department of elocution, Kate Seaver Downs; W. Havemann, Latin; Rev. Charles Bransby, Spanish; Prof. A. H. Dietz, French; Herr Arnold Kutner, German; Adolph Willhartz, piano, organ, theory and harmony; Bertha Butler, voice; H. R. Hamilton, violin; C. S. DeLano, guitar; Miss A. Werner, mandolin. Art department, Mrs. C. F. Merrill; Alice M. Broadwell, director of gymnasium; Martha Stewart, matron.

Harvard Military Academy.

On the 19th of March, 1889, Harvard School was established, and opened to students by Profs. N. W. Murch and H. L. Lunt.

It was designed to provide thorough and careful instruction in English, science and the classics—fitting its students either for college or business. The character of the school and the quality of instruction soon won for the institution a goodly number of students, which steadily increased till it became necessary to procure more commodious and convenient quarters. Fortunately in this emergency the St. Vincent College building, used as the United States Army headquarters, was soon to be vacated, and a lease was obtained of this building, which adequately supplies the wants of the school.

The college building is located on the corner of Sixth and Hill streets, directly opposite the postoffice. It is accessible by street cars from all parts of the city. The grounds comprise two and one-half acres of lawn admirably adapted for drills, lawn tennis, croquet, base-ball and other outdoor sports.

At this juncture it was deemed advisable to change in some respect the character of the school by introducing military drill and discipline, and by opening a department of elocution and oratory. This necessitated, also, a change of name in the school, which is now known as the Harvard Military Academy.

There are over 125 students in attendance. The instructors are: N. W. Murch (graduate of Phillips, Andover, Mass.), mathematics and science; H. L. Lunt, A.B. (graduate of Bowdoin College, Maine), Greek, Latin, English, book-keeping; W. Havemann, A.M. (graduate of Göttingen, Germany), ancient and modern languages; Godfrey Birdsall (of West Point), mathematics and military tactics; H. B. Small, assistant in English.

Los Angeles University.

This institution is under the patronage of the Baptist Church. The buildings, which cost about \$35,000, are located in a campus of 16 acres, just outside the city limits in the west. The buildings occupy a commanding view of the Sierra Madre range on the north, and of the Pacific Ocean on the west.

The college property is free from debt. One hundred and eight pupils were enrolled last year.

The faculty is as follows: Rev. J. H. Reider, president, intellectual and moral philosophy; Rev. H. C. Bristol, A.B., Greek, higher mathematics, book-keeping and commercial law; Miss Jennie Pomerene, A.B., Latin and German literature; Rev. T. N. Lord, chemistry, physics, rhetoric and physiology; Miss Emma Bennett, A.B., French, English literature and calisthenics; Mrs. Emma B. Reider, mathematics and United States history;

I. N. Inskeep, penmanship and free-hand drawing; Miss Bell Stites, drawing and painting; Henry Ludlam, elocution; Miss Emma F. Rider, M. M., instrumental music, voice culture, theory and practice; Miss Kate C. Rider, M. M., instrumental music.

Other Institutions.

Other educational institutions of the city are: Occidental University (Presbyterian), Rev. S. H. Weller, president; Ellis Villa College (young ladies), Prof. Henry Ludlam, principal; St. Paul's School, for young men (Episcopal), under management of Rev. Elias Birdsall; Los Angeles School of Art and Design, Los Angeles Conservatory of Music, Girls' School of Sisters of Charity, Boys' School of Santa Vibiana Cathedral, Woodbury Business College, Los Angeles Kindergarten, and numerous private schools.

CHURCHES, ETC.

Religious and Other Organizations of the City.

Los Angeles contains 42 church organizations, 39 of which occupy buildings of their own. They represent nearly every shade of every creed, have a fair membership and a steady healthy growth, and are well attended. The following is a list of the city churches:

Presbyterian	9
Methodist Episcopal	8
Congregational	6
Protestant Episcopal	4
Baptist	5
Roman Catholic	3
Christian	2
Unitarian	1
Lutheran (English)	1
Lutheran (German)	1
Lutheran (Swedish)	1
United Presbyterian	1
Methodist (German)	1
Methodist (South)	1
Holiness Band	1
Latter Day Saints	1
Hebrew	1
Seventh Day Adventist	1
Free Methodist	1
Salvation Army	1
Swedish Methodist	1
Swedish Baptist	1

YOUNG MEN'S CHRISTIAN ASSOCIATION.

Within the last year, this organization has occupied part of its new building, situated on Fort street near Second, adjoining the California Bank building. Nearly \$80,000 has already been expended on this beautiful block, which when entirely completed and equipped will cost \$125,000.

A practical work is carried on by this association among the young men of Los Angeles, varied and adapted to the needs of young men in general.

A lecture course, by the best talent obtainable, and entertainments of a high order are carried on during the season. The association is assisted in this work by the Ladies' Auxiliary of the association, composed of about 100 ladies, of which Mrs. J. D. Burch is chairman.

Young men coming as strangers to the city are aided in securing boarding places in good families, and as far as possible assisted in securing positions. A monthly average of over fifty visits are made to sick young men, and in several instances young men have been interred by the association in its lot at Evergreen.

A gospel meeting for young men is held on Sunday afternoons at 4 o'clock, attended by about 300 young men.

The reading-room and parlor, open every day from 8:30 a.m. to 10 p.m., are largely attended, and form a pleasant home to strangers and others. Many of the most successful and prominent business men of the city are members of this rapidly-increasing organization, of which Mr. F. A. Seymour, M.D., is president, and Mr. A. P. Chipron is acting general secretary.

Other Christian and benevolent institutions are: Woman's Christian Temperance Union, Young Women's Christian Temperance Union, Los Angeles Humane Society for the Prevention of Cruelty to Children and Animals, Los Angeles Orphan Home, Ladies' Benevolent Society, Italian Benevolent Society, Union e Fratellanza Garibaldina, Order of Good Templars, Sons of Temperance, Ladies' Aid Society, Ladies' Missionary Society, Arion Band of Little Missionaries, Flower Festival Society.

The Flower Festival Society holds every year, in the month of April, a festival lasting a week, at which the display and decorations are entirely of flowers and foliage.

The lady managers realize large sums of money, which are expended in the maintenance of the Woman's Home and the Woman's Exchange. For the former they have a large, handsome building, with accommodations for 70, where working girls and women can have a respectable home at a moderate price. The latter was established to provide a place for the sale of women's work, to furnish a mart where those women who have to support themselves or eke out a slender income by small articles of manufacture, needlework,

embroidery, preserving, etc., may reach the public.

Following are the hospitals of the city:

Los Angeles County Hospital.
Los Angeles Infirmary, conducted by the Sisters of Charity.
St. Paul's Hospital.
Southern Pacific Railroad Hospital.
Santa Fe Railroad Hospital.
French Hospital.

MANUFACTURERS.

The Industries of Los Angeles City—Annual Product, \$3,154,593.

Statistics compiled by the Board of Trade show that the manufacturing industries of this city turn out an annual product of \$3,154,593. These figures are compiled from only partial returns, and do not comprehend many of the heaviest establishments in the city.

According to the most reliable returns there are the following manufacturing establishments in Los Angeles:

Asphaltum works	1
Bakeries	24
Beds and bedding makers	11
Blacksmiths	27
Book-binders	5
Bolermakers	2
Boot and shoemakers	75
Boxmakers	3
Brass works	1
Breweries	1
Brick manufacturers	15
Cabinet makers	5
Cane manufacturers	1
Carpet-beating works (steam)	4
Carriage and wagon makers	21
Wood carvers	3
Cement works	6
Chair manufacturers	3
Cider manufacturers	1
Cigar manufacturers	10
Coffee and spice mills	4
Cold storage and ice works	5
Confectionery manufacturers	4
Desk manufacturers	3
Distilleries	1
Dress and sash factories and p'ing mills	10
Dressmakers	103
Dyeing and scouring works (steam)	11
Electricians	5
Electric light companies	1
Electrical apparatus manufacturers	1
Electrotypers	1
Engravers	1
Fireworks manufacturers	1
Flavoring extract manufacturers	2
Flour mills	2
Founders and machinists	5
Fruit-canning, drying and crystallizing	2
Furniture manufacturers	6
Galvanized iron workers	7
Gas companies	1
Gas machine manufacturers	1
Gilders	2
Ginger ale manufacturers	1
Glove manufacturers	1
Harness and saddlery works	28
Ice cream manufacturers	2
Iron foundries and works	2
Jewelers (manufacturing)	7
Laundries (steam and white labor)	11
Lime burners and dealers	17
Lithographers	1
Locksmiths	4
Mantel manufacturers	5
Marble works	7
Mill builders	2
Milliners	24
Feed mills	2
Wineries	5
Oil refineries	1
Painters (fresco)	33
Painters (house, sign and ornamental)	33
Paper hangers	16
Paper manufacturers	1
Patent medicine manufacturers	5
Pavement manufacturers	12
Perfumery manufacturers	13
Photograph galleries	3
Pickle manufacturers	2
Plasterers (contractors) and whitewashers	7
Pork-packers	1
Potteries	1
Printers (book and job)	23
Publishers (including newspapers)	43
Rubber stamp-makers	3
Screen manufacturers	5
Seal engravers	2
Sewer pipe-makers	5
Sheet iron-workers	4
Shoddy mills	1
Show case manufacturers	1
Stair-builders	4
Stamping and pinking works	1
Stereotypers	1
Stone yards	7
Straw works	1
Tailors	45
Taxidermists	1
Tent and awning-makers	4
Tin-can manufacturers	5
Trunk-makers	1
Upholsterers	10
Vinegar manufacturers	2
Water pipe-makers	7
Willow ware-makers	2
Windmill makers	9
Wire-workers	2
Wood engravers	1
Wool-pullers	1
Yeast manufacturers	1
Total	803

IN A NUTSHELL.

Statistics About Everything Generally.

The cash on deposit in the banks of the city and county of Los Angeles, July 1, 1889, was \$10,329,063.66.

The total capital stock (paid up) and surplus of the banks of Los Angeles city and county, July 1, 1889, was \$4,724,380.04.

The total available cash of the banks of Los Angeles city and county (money

on hand and in other banks), July 1, 1889, was \$5,250,879.96.

The total assets of Los Angeles city and county banks, July 1, 1889, was \$15,571,798.78.

The total assessed wealth of the State is \$1,111,590,979.

The total assessment of Los Angeles county, after equalization and deduction for Orange county, is \$84,376,319.

This does not include railroads, assessed by the State Board of Equalization.

The total assessment set off to Orange county is \$9,270,767.

The rate of assessment for State and county purposes is \$1.50 on the \$100 in the city limits, and \$1.80 in the country.

The rate of city assessment is \$1.10 on the \$100.

The total outstanding bonded indebtedness of the county is \$751,520. No floating debt.

Total number of acres in Los Angeles county assessed, 1,652,928.

The fees of the County Recorder's office for the year were \$23,627.40.

The County Clerk collected fees during the year amounting to \$44,011.12—an increase of 35 per cent. over the business of the year before.

The total disbursements for carrying on the county schools during the past school year were \$380,419.20.

Bonds to the amount of \$219,540.68 were sold during the year for the purpose of erecting and furnishing school buildings outside of the city of Los Angeles.

The total assessment of the city of Los Angeles, after equalization, is \$46,997,101.

Graded and graveled streets constructed during the year in the city, 55,080 feet; cost, \$133,576.03.

Paved streets, 11,590 feet; cost, \$104,637.70.

Sidewalks laid, 39,352 feet; cost, \$22,839.50.

Sewers laid, 17,763 feet; cost, \$20,458.40.

There are seven parks and a nursery belonging to the city, upon which was expended last year \$21,833.49.

The sum of \$200,000 in bonds was voted by the city last year to furnish new school lots and buildings.

Number of school children in the city, according to Census Marshal's report, 10,786; number enrolled in the public schools, 8128.

During the year 4771 volumes were added to the Public Library, and elegant new quarters in the City Hall have been fitted up.

The total expenditures this year (since April 1st) on the Library amount to \$21,428.46.

The police force of the city numbers 90 men, exclusive of the Chief and Matron. The arrests from January 1st to November 30, 1889, inclusive, numbered 3407.

Los Angeles has 888.88 inhabitants to each officer.

The city license collections amount to an average of over \$16,000 per month.

The total revenue to the city from sales of water amount to \$11,991.15; total expenditure, \$10,100.18.

The City Tax Collector reports total collections for the year ending November 30th, \$978,106.04.

Total number of building permits issued from August to November 30th, 194; total cost of improvements, \$759,575.

The total amount invested in buildings in Los Angeles during 1889 approximates \$4,423,019.

There were 166 fire alarms in 11 months, to December 1st, and the losses aggregated \$81,220.

In the decade from 1880 to 1890 Los Angeles has increased in population from 11,183 to 80,000.

The taxable wealth of the city has increased during the same period from \$7,627,632 to \$44,871,073.

The total number of transfers of real estate during the year was 18,545, aggregating in amount \$35,309,468.

The Southern Pacific Railroad Company forwarded 34,403,549 pounds of freight from Los Angeles station during the year.

Wells, Fargo & Co. report a freight traffic of 7,150,104 pounds.

There are 1050 telephones in use in the city.

The Postal Telegraph Company opened an office in this city last year. The first two barracks of the National Soldiers' Home were completed during the year and the home established in full running order.

Six hundred and eighteen vessels of all kinds arrived at the port of Wilmington during the year. Domestic tonnage, 441,753; foreign, 47,747; total, 489,500.

The imports of lumber at the port of Wilmington were 48,924,000 feet; coal, 73,015 tons; merchandise, 29,690 tons; railroad ties (number), 962,550.

The collections of the port of Wilmington for the year were \$58,060.23.

From January 1st to December 1st there was no day when the thermometer fell below 32 degrees Fahrenheit (the freezing point). There were twenty hot days when the mercury climbed above 90 degrees.

The United States Land Office dis-

posed of 161,444 acres of land for \$98,834.80.

The total internal revenue collections in this city for eleven months amount to \$147,881.

PETROLEUM.

The Production of Southern California.

Nearly all the petroleum deposits of the southern counties are situated in Los Angeles and Ventura counties, and which occupy an area of 250,000 acres. This important product is rapidly becoming one of the most valuable in Southern California, the yield for 1889 aggregating in value \$1,200,000. Its utilization as fuel for manufacturing purposes has had much to do with solving a vexed question in Southern California.

Following is a report of the petroleum produced in this State during the past 10 years, nine-tenths of which is produced in Los Angeles and Ventura counties. The figures represent gallons:

1879	568,000
1880	1,768,000
1881	4,194,000
1882	5,403,000
1883	6,000,000
1884	6,000,000
1885	8,760,000
1886	10,950,000
1887	12,400,000
1888	15,000,000
1889	18,000,000

The value of this immense deposit of petroleum to Southern California can hardly be estimated.

As yet the supply is not sufficient for refining purposes and to supply all demands for crude at home and to export. A pipe line to carry petroleum either from the fields of Santa Paula, Ventura county, or Puente, Los Angeles county, to the city of Los Angeles has been much talked of, and some day will doubtless be accomplished. With such cheap transportation the price of petroleum could be reduced to such figures as to encourage the establishment of many manufacturing enterprises here.

The Sesse Company already has an extensive pipe-line system from its wells to the wharf at Santa Paula, whence it is shipped by vessel to the refinery at Oakland.

The production of the several fields now in operation is placed by experts at the following figures:

District	No. Wells	Daily Production, bbls.
Sesse	25	800
Ex-Mission	43	250
Newhall	33	250
Puente	14	120
Tower Cañon (new)	3	130
Montecito	1	40

Total daily production 1340

The Sesse Oil Company has closed a contract with the Simi Land Company to sink a well for development in the Simi ranch.

Wages.

The following rates are obtained in Los Angeles:

Housekeepers, per month	\$25 00 to \$40 00
Girls (house servants), per month	15 00 to 30 00
Cooks (men and women), per month	20 00 to 100 00
Laborers, per day	1 50 to 2 50
Carpenters, per day	2 50 to 3 50
Brick masons, per day	3 00 to 5 00
Plasterers, per day	3 00 to 4 50
Lathers, per day	3 00 to 4 50
Painters, per day	2 50 to 3 50
Harness-makers, per day	3 00 to 4 00
Tinners and plumbers, per day	3 00 to 4 50
Clerks (store), per week	8 00 to 25 00
Bookkeepers, per month	50 00 to 125 00
Clerks (off. e), per month	35 00 to 100 00
Boarders, per month (and)	25 00 to 40 00
Bakers, per month	30 00 to 80 00
Butchers, per month	30 00 to 80 00
Paper-hangers, per day	3 00 to 4 00
Job printers, per week	10 00
News compositors, per M.	50
Book compositors, per M.	45
Evening compositors, per M.	45
Book binders	2 50 to 3 00

"Hub" of the Bean-growers.

Satcoy, Ventura county, is the "hub" of the bean-growing industry, and claims the blue ribbon for the largest shipments of farm produce made on the Ventura division of the Southern Pacific. There have been shipped out for the 12 months to November 1, 1889:

	Pounds.
Beans	3,077,035
Barley	1,664,540
Hogs	500,000
Corn	340,350
Cattle	149,000
Sheep	80,000

For the month of November, 1889:

Beans	1,049,745
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Projected Improvements.

Plans are under way by Frank J. Capitan, architect, for the following buildings to be erected:

	Approximate Cost.
Portland cement factory, with capacity of 400 barrels output every 24 hours, in close proximity to Los Angeles	\$150,000
Grain elevator, capacity 250,000 bushels	80 00
Arrangements are being made for the erection of a distillery, to be built at Los Angeles	75,000
J. K. Molibenny, two-story brick stores and lodging, Marchessault street	5,500
S. C. Hubbell, 5-o-story brick stores and lodging, Marchessault street	4,800
Grand total	\$315,300

SCENES IN AND ABOUT LOS ANGELES.



(1) Century Plant in Blossom. (2) Fort-street Methodist Church. (3) Central Park. (4) Edgar Cañon, San Bernardino Mountains. (5) Banana Plant, Bellevue Terrace, Pearl street.



(1) Abstract Company's Building. (2) New Courthouse. (3) Protestant Orphan's Home. (4) City Hall. (5) Bell Tower, San Gabriel Mission.

THE SAN GABRIEL.

THE FAMED GARDEN SPOT OF SOUTHERN CALIFORNIA.

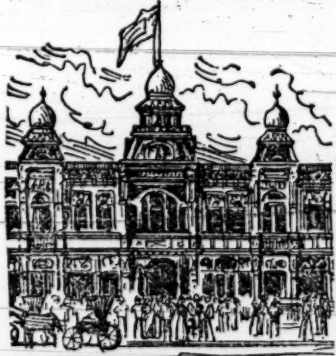
The Foothill Country—The Towns, Cities and Villages—Ranches, Fruit Interests—Climatic Conditions—Mountains and Canyons.

SAN GABRIEL VALLEY is perhaps the best known section of all Southern California. Before the country was known or heard of as a health resort the Mission Fathers held possession, and by their enterprise, intelligence and power over the Indians made it the center of interest on this coast. The occasional traveler who made his way here in these palmy days found a royal welcome and a principality where a few men apparently controlled the entire situation. The old fathers selected the valley because of the richness of the soil, its fertility, its beauty, and, finally, because, as the old documents show, they considered its climatic conditions favorable to the attainment of extreme old age.

These reasons are the ones that a hundred years later caused the valley to be settled up, and today we find it dotted from one end to another with towns and villages, representing the best and most advanced phases of modern civilization.

The San Gabriel lies in Los Angeles county, extending for about forty miles or more parallel with the Sierra Madre range; is about ten miles across, consequently embraces, roughly speaking, about four hundred square miles of surface, almost all of which is available for agricultural purposes.

The valley is almost completely



Pasadena Opera-house.

environed by mountains or lofty hills, the first adventurers finding no little difficulty in penetrating the rocky walls. Upon the north are the Sierra Madres, with parallel ridges extending for 40 miles or more away toward the desert; to the south and east the land gradually rises in hills, separating it from Pomona, while to the west and south the range of the Puente Hills constitutes an effectual barrier; the western side is protected by the San Rafael hills and the Arroyo Seco. In this natural basin or valley, green-walled by mountains, we find ranches, groves of orange, lemon, lime, apple, pear, peach; in fact, an agricultural paradise, boundless in its resources and possibilities. It may be divided into three distinct regions: that embracing the southeastern region, including Puente and neighboring towns, and famous for its alfalfa. Here the land is moist, water rising near the surface and being found the year round. This section is practically unfit for oranges, though some are grown there, it being pre-eminently a farming and grazing country; several crops of alfalfa being grown during the season, while corn and other grain are produced in great abundance. The region between this and the mountains, having an altitude of about 1000 feet, is general farming land, but includes the orange and other citrus fruits; the frosts found to some extent in the alfalfa lands not being experienced here. This belt includes the finest towns and cities in the valley—Pasadena, Monrovia, Lamanda, Sierra Madre, San Gabriel, Alhambra and others. In the ranches of these places we find the fruits of nearly all zones: the pomegranate, apple, orange, peach and guava attaining the highest cultivation. Between this and the mountains we have a foothill area, with an altitude of from 1000 to 1500 feet, devoted to the culture of all these fruits—to beautiful homes and ranches and sanitariums for the benefit of those who require a higher altitude.

These three zones, as we may call

them, have decided climatic differences. The Puente region has more frost; is cooler in winter, and greener and fresher in summer. The middle region is perhaps the most popular, striking, as it does, an average, combining some of the features of all.

The climate of the San Gabriel can be best described as a whole. Here one has an annual mean of about 61.75°. The January mean, taking Pasadena as a type, is about 52°; that of July 67°. When it is remembered that the valley is in the latitude of Wilmington, N. C., these figures will seem singular. Their significance is this: They offer to the outside world, to those who would escape the rigors



Painter Hotel, Pasadena.

of the East, a winter without snow, ice, blizzards; where the temperature rarely reaches 32°, and the season is marked by agricultural activity, this being the time the grain is planted. Usually, at Christmas, oranges are about ripe, and barley is a few inches high; while February, the disagreeable, blustering month of the East, finds the San Gabriel richly tinted with wild flowers—a vision of loveliness.

The July temperature, as shown, indicates that the summers are really cooler than those experienced by many cities in the East. To sum up, the climate of the San Gabriel permits a residence the entire year under conditions singularly favorable for the enjoyment of life and health from one end of the year to another. In other words, it is not a seasonal resort like Bermuda, Bahama, Florida or Southern France and Italy, but offers something the year around. In this respect the climate of Southern California merits the attention of students of questions of health. It is becoming more and more evident that the majority of invalids require a residence in the given locality of a year or more. Returning north from Florida at the end of three or four months brings the invalid back to the locality where the trouble commenced, too soon; consequently, physicians now order a prolonged stay, and it is believed that Southern California offers the best all-the-year-round conditions to be found. The test of a climate is seen in the record of the Health Officer, and the report recently made by Dr. W. L. McAllister, Health Officer of Pasadena, shows a remarkable state of things. The record besides Pasadena and vicinity included Monrovia or towns within the ten-mile range. The death rate for the year was 125; of these 48 were consumptives, nearly every one having come here with the disease. Taking these and the accidents from the list, we have a



Mariposa Villa, Pasadena

death rate of 71, which is about five per thousand, allowing 15,000 for the population of the ground covered. Out of these there were four cases of pneumonia, two cases of typhoid fever, one of diphtheria. The freedom from these dreaded diseases is unparalleled, and the San Gabriel is well justified in claiming to be a health resort in all the term implies. It has no diseases peculiar to it; is comparatively free from those which claim so many victims in the East, and has a record in bringing back to health and strength hundreds who came here without

hope, and to those who can come, and who have not put off the change, she offers a home amid fair surroundings and a very simple cure—life in the open air. The record shows that the valley has more clear, sunshiny days than almost any known and tested locality.

In describing the cities and towns of the San Gabriel it is intended to glance at them from the standing of today. Their histories have been told, the marvelous growth dilated upon, and every one is familiar with it. What the reader and tourist, the home-seeker, wishes are facts relating to the cities and towns of today. Are they growing, or are they going backward? What are the conditions of life there, and what am I to expect for myself and children? Some of these questions are answered in the following:

In entering the San Gabriel Valley from Los Angeles one comes upon Pasadena immediately, though the terms South, North and East Pasadena are given. The city lies at the head of the San Gabriel; hence the term, "Crown of the Valley." Pasadena embraces the country from the Sierra Madre six miles south, and from the Arroyo Seco five miles east, covering an area of 30 square miles, with fine ranches, elegant homes and villas. The city is laid out with regularity; fine avenues, as Orange Grove, Marengo, Euclid and Los Robles, extending north and south, leading to the mountains; while streets, broad and well kept, as California, Colorado, Walnut, Villa, extend east and west. In many cases these have fine pavements of cement. Orange Grove and Fair Oaks avenues being provided with walks of this kind for their entire length, and at least 50 miles of such pavements are found

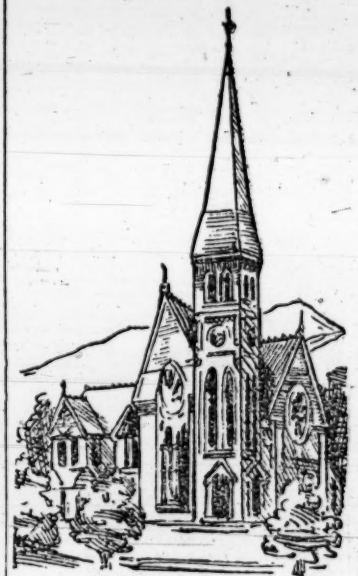


Presbyterian Church, Pasadena.

over the city. The residence portion is divided into eastern and western, the business part being in a slight depression between them. The residences are in many cases large, costly and beautiful, reflecting credit upon the people for their taste. During the past year a number of elegant mansions have been erected; those of Mr. Stimpson and Mr. Chrystie on California street, Mrs. Green on Orange Grove avenue, the elegant residence of Col. H. H. Markham and others being specimens. In this respect Pasadena has shown a steady push to the front, and the improvements run up into many thousands of dollars, while a significant point is that all the new buildings are of a costly and expensive kind. Nowhere can homes be made so beautiful as here. With the semi-tropic foliage, palm, pepper, orange, lemon and lime to draw upon, and a wealth of verdure winter and summer, places can be given the appearance of age in a few short years. Pasadena, while eminently a city of homes and beautiful residences, is an important business center. Her banks—the First National, San Gabriel Valley, and Pasadena National—tell the story of her financial stability, while the business forms that find place here are similar to those of cities anywhere of this size. Here are all the societies, religious denominations found in the East, with large and handsome places of worship. This year has seen two new churches added—the North Pasadena Presbyterian and the Church of the Angels at Garvanza, the latter being one of the finest in its decoration in Southern California. The schools of Pasadena are well adapted to the requirements upon them; are large and commodious, affording facilities for education for over 1200 children.

In a review of this beautiful city for a year we note the following points:

An increased wealth in buildings, a rapid development in railroads, and a new interest in the development of agriculture. The city is now a railroad center, and has much in store in the future. The Atchison, Topeka and Santa Fé transcontinental line passes through the heart of the city, and there are two rapid transit lines approaching it from

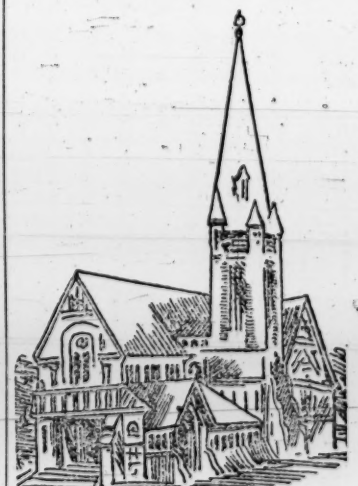


Methodist Church, Pasadena.

Los Angeles; one of which, the Cross road, has formed an alliance with the Altadena line, and will ultimately become a through line to Utah. This latter movement is one of the most important of the year, and has great bearing upon the future outlook of the city.

During the past year the city has been provided with an electric light system; many of the streets being illuminated, as well as houses, which, with an elaborate gas plant, gives every necessary facility in this direction. The hotels of the city are everything that could be expected in a health resort of this kind. The Raymond has a world-wide reputation and is crowded every season. The Painter, at a higher altitude, affords accommodations for 150 guests, while the Acme, Southern, Mariposa Villa, Marengo Hall and others amply meet the demand. The Webster is the new hotel of the year, and at the time of writing is preparing to open as a first-class house and one that will be a credit to the city in every respect. The city is well provided with sanitariums; those of Dr. Schumway, Dr. Gleason and Dr. Hodge, being well-equipped in every particular, and graded altitudinally to suit the demands of the patients.

The city of Pasadena is governed by a board of trustees, while a board of trade attends to other matters. It has a finely-equipped fire department. In the matter of newspapers it is well supported. The LOS ANGELES TIMES fills the morning field with a Pasadena edition, giving the news of the world and that of Pasadena at the breakfast



Episcopal Church, Pasadena.

table; and there is a local daily and two local weekly papers published. The claim of Pasadena as a health resort is too well known to dwell upon. Hundreds here can testify to what her climate has done for them, and cases without end could be cited of persons who came here almost without hope who are now in active business.

While claiming to be a health resort, Pasadena is a vast orange grove, and devoted to agriculture. Large ranches are found on every hand, producing

wealth to those interested in that branch.

What two women can do is well shown by the work of Miss Amos and Miss Himmman. These ladies were school teachers, and seeing so much fruit going to waste, they began to preserve it. Borrowing a small sum, they purchased glasses, and in a small way began the preserving of fruits, and now have a reputation that has gone into every State in the Union; in other words, they have made a great success of the venture, having proved to business men that fruit-preserving could be made to pay in Pasadena at a time when conservative men doubted it.

The orange industry is too well known to speak of, but we may refer to the grove of William T. Clapp, on the corner of Orange Grove avenue and California street. Mr. Clapp came here 16 years ago; planted trees on 30 acres, and by the ordinary care

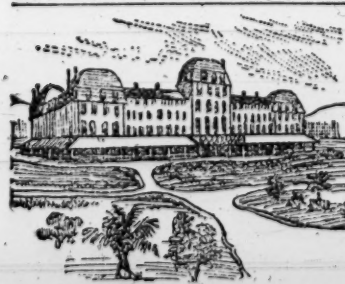


Universalist Church, Pasadena.

has a grove that produces a good income every year, the only care he gives it being that which would suggest itself to any farmer or ranchman. The orange pays every one, and the crop this year is larger than ever before. Mr. Gilmore, on the opposite corner to Mr. Clapp, sold his crop for \$1000, on the tree. In the East it would take a farm of twenty times this much acreage to produce this sum.

There is nothing that cannot be made to pay here. Almost every fruit, grain or vegetable raised anywhere is found on these ranches and farms; the walnut, almond, peach, orange, lemon, lime and guava meeting here on neutral ground. Mr. James Campbell, president of the Park Nursery Company, stated to THE TIMES that this industry was one that had a great future. The company has a fine experimental station at Linda Vista, where almost every fruit, flower or plant known is successfully raised, and the gentleman in charge, Mr. Leithead, is constantly making experiments to increase the flora of this country.

There is a lighter side to the city. Its social conditions are those of the East. It has its social clubs, its societies: The Valley Hunt Club, C. F. Holder, president; the Pickwick Club, W. U. Masters, president; the Academy of Sciences, Delos Arnold, president; the Gun and Hunt Club, the Riding Club, the military company, and many more, all alive to the importance of providing pleasure for the people and the guests here. The city has a \$150,000 opera-house, a \$25,000 Public Library; in fact, almost every feature found in eastern cities of three times the size is found here, showing that while modern Pasadena is scarce three years old,



The Raymond, South Pasadena.

and the entire city is not two decades old, almost everything to be found elsewhere in the favored portions of the East finds place here.

The city shows during the past year a healthy growth, and despite a period of depression, there has been an advancement on all sides, and the time is not far distant when Pasadena and Los Angeles, as far as the outward eye is concerned, and in interest, will be one city, bound by bonds that will constantly grow closer.

THE VALLEY TOWNS.

Brief Sketches of Various Points About Pasadena.

SOUTH PASADENA.

While South Pasadena is in reality but a part of the city proper it is an incor-

porated town; yet in climate, productions and general conditions it accords with the portion already described. The city shows a gradual and healthy growth. The great and popular Raymond Hotel is in its northern borders, and by its presence adds to the attractions of the place.

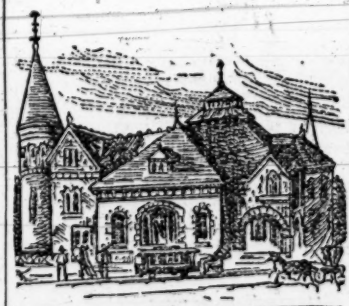
The town abounds in ranches and homes. Here is the fine nursery of H. N. Rust, where thousands of orange, palm and other trees are raised. Near the depot a fine brick block has been built, and there is an air of prosperity about the entire town. There has been established near the depot a sanitarium, with electric baths, under the care of a distinguished lady physician, which is a great addition to the town and a convenience to the Raymond guests, who have been obliged to go to Los Angeles for conveniences of this line. The new rapid transit road passes through the place, and will be an important feature in its future. In its educational features, its churches, societies, the town is well abreast of other places of like size in the valley, and offers every inducement to the home-seeker or tourist.

GARVANZA.

This town, like others on the Atchison, Topeka and Santa Fé, shows a healthy growth during the past year. A fine schoolhouse has been erected, of such proportions and fine appearance that it might well be taken for a public hall. The Messrs. Campbell-Johnston have erected a fine brick and stone block, and made many valuable improvements, thus showing their faith in the town. The population is increasing here and there will be an increasing demand for houses and property. The most important public improvement is the erection of the Church of the Angels, on the property of the famous San Rafael ranch, by Mrs. Campbell-Johnston. The building and its equipment cost over \$50,000, and is one of the finest in the State. Back of Garvanza lies the San Rafael ranch, with its hundreds of acres, its winery, fine stock and pasturage—the choicest and largest ranch in the vicinity.

MT. WILSON.

A year ago Mt. Wilson was known simply as a peak 6000 feet high, oppo-



Pasadena Library.

site Pasadena. Now it is better known as the proposed site of one of the largest telescopes in the world. This instrument is to be placed here by the munificence of ex-Mayor Spence of Los Angeles and the University of Southern California. Harvard University has at present a telescope on the summit where astronomers have found conditions extremely favorable for their work. A company of Pasadena capitalists have commenced a trail to the summit which will be a toll road; passing through some of the finest scenery in the Sierra Madre range, affording glimpses of grand canyons, lofty trees and other curiosities which will well repay the lover of mountain-climbing. Besides the toll road there are at present two trails reaching the peak. Los Angeles men are prepared to open a hotel at the Wilson Park, 6000 feet above the sea, as soon as the road is completed, and next summer will probably see this accomplished. At present Mr. Peter Stiel is the host, keeping a large tent hotel. This was patronized last summer by over 3000 guests—a fact suggestive of the popularity of the place when it receives its equipment of a first-class hotel. The toll-road will be but the introduction of a cog road, which will carry passengers up the slopes after the fashion of the Mt. Washington road. Already such a road is talked of as an extension to the Altadena; the ground has been surveyed, and that it would pay goes without saying.

C. F. HOLDER.

Other Towns in the Valley.

LA CANADA.

During the past year the side valley of La Cañada has experienced an unusual era of prosperity. Not less than 300 acres of land have been cleared of greasewood and brush, and at least 50 acres set out to citrus fruit trees.

The orange trees, and the lemon

trees as well, are loaded with fruit this season, the limbs being propped up in order to sustain the weight.

Mr. Pickens has built a handsome residence in the valley during the year, which, with the exception of some small houses, is about all the building that has been done.

The citrus fruits seem to be unusually thrifty in this vicinity, being clean and fine flavored. Cañada oranges compare favorably with those of Riverside or any other place in Southern California.

The prospect for the coming year is encouraging. Owners of large tracts will set out trees.

There is also a large area set out to bearing deciduous trees, which also do remarkably well.

An abundance of water for all purposes thus far gives the valley an advantage, and the prospect for the development of water in the future is good. La Cañada is prospering; and bids fair to become one of the best agricultural and horticultural districts in the county.

ALHAMBRA.

Alhambra's advance and progress during the last twelve months has been on a par with its reputation for being one of the most flourishing and solvent resident towns in California.

The buildings erected in this period, both public and private, are noted for their substantial and elegant character, and for good taste. The Baptist Church, built at a cost of \$3000; the bank building, \$6000; the residence of J. M. Elliott, costing \$12,000; that of G. B. Adams, \$4000, with others now in course of construction, are all indications of what homes, with their several accessories, can be made in California.

The Public Library still continues to add to its volumes, having now 1200 books on its shelves. The bank, opened in March, with a stock capital of \$100,000, has proven a financial success. The schools have an average attendance of 170 pupils, instructed by four excellent teachers.

The elegant hotel, under a new management, has fully sustained its well-earned reputation, and has catered to the comforts of a large number of guests. The Village Improvement Society, reorganized, has instilled new life into the ornamentation and beautifying of homes and public places. The church organizations, Presbyterian, Methodist, Baptist and Episcopal, are all flourishing, having added many to their membership during the year.

The raising of citrus trees continues to be a leading industry, there being in nursery at present 140,000 budded orange trees, a great portion of which is contracted for early delivery. Alhambra was the second largest shipper of oranges by rail in California during the season of 1888-9—44,175 boxes being shipped over the Southern Pacific Railroad alone. The amount of freight handled was 500,000 pounds, and 7918 tickets were sold at this station for the 11 months ending December 1, 1889. The large number of 3225 tickets were also sold at the San Gabriel Rapid Transit Railroad station in this place, covering same period.

The cultivation of citrus fruits will as heretofore continue to be the leading industry. Extensive preparations have been made to set out a large acreage to oranges the coming year. The soil, location, unequalled water supply, accessibility to market and shipping facilities make it in every way particularly adaptable.

Alhambra has become such a combination of elegant homes, surrounded with semi-tropical foliage and highly cultivated orange orchards, with their symmetrical trees and luscious fruits, that it has attracted the attention of tourists and home-seekers to an extent that its hospitality is being tested more and more each year by the strangers that come among us.

SIERRA MADRE.

This beautiful little place has not only held its own during the year just passed but has made improvement.

Among residences constructed are those of Mr. Miller and Mrs. Tufts, besides which Mr. Oleson has constructed a business block on Baldwin avenue.

Sierra Madre never has made much pretensions to being a business place; being, in fact, a little town of delightful homes. Located at the very foot of the mountains it enjoys a magnificent prospect of the valley below and of the grand mountains at her back.

It is here that the trail starts up the mountains for the famous Wilson Peak.

Sierra Madre Villa is but a mile distant to the northward, beyond which is Abbot Kinney's well-known place.

This is the home of a number of well-known people who are highly classical in their tastes and accomplishments, being literary, musical and artistic.

Sierra Madre has an abundant water supply, which is to be quite extensively improved by the construction of new and larger reservoirs, and the laying of

pipe lines and also the development of more water.

The orange crop this season is doing particularly well, the most of it having been sold already.

Splendid fruits of many varieties are raised at Sierra Madre, and some of the fine wines are manufactured on a small scale.

MONROVIA.

Monrovia is a city which has as much go-ahead spirit as any town in Southern California. It is here that a number of prominent people have made their homes, among them being J. M. Studebaker, the famous wagonmaker of South Bend, Ind.; A. M. Lee of Cleveland, O.; J. I. Case of Racine, Wis., the manufacturer of agricultural implements and the owner of the famous trotter bearing his name; Hon. E. F. Spence and Judge Bicknell of Los Angeles, which latter gentleman is about to build a handsome home here.

One of the latest real-estate transactions was the sale of a 5-acre tract to Mr. Rider, who will set out the land in Navel oranges. This fruit is one of Monrovia's productions, in which the citizens feel a just pride. This includes Duarte, which is just over the townsite line.

New land is being broken and agricultural pursuits are furnishing the principal occupation to the residents.

During the year I. K. Drew has built an elegant home here and J. P. Harvey will soon build near the residence of Hon. E. F. Spence.

The University of Southern California is soon to open a branch educational institution at Monrovia, and it is said President M. M. Boyard of the University in Los Angeles will make his home here soon.

Monrovia feels quite proud of her educational advantages, which are certainly excellent.

Speaking of "orange land," it can now be bought here, the best of it at \$200 per acre, with abundance of water for irrigation. It is positively asserted that the Monroe tract is producing Navel oranges at the rate of \$300 per acre, net. The trees are in splendid condition and are 4 years old.

The banks, of which there are two, report business quite good during the year, having been better during the last few months than in the early part of the year. Deposits are on the increase.

Among the enterprises which may bring this town into greater prominence the coming year is a fruit cannery, of which there is talk of establishing.

A large, two-story building, located originally near the Santa Fé depot, is now being moved a mile into the heart of town, where it will be utilized as a business block.

Monrovia expects to ship about eighty carloads of oranges this season, some having been already shipped.

GLENDORA.

Glendora is located practically at the eastern end of the San Gabriel Valley. Situated on elevated ground, it overlooks the entire beautiful valley to the westward and southward.

Glendora, once a boom town, is now settled down to business. Considerable farming has been done during the past 12 months, and more will be carried on the present year.

The discovery of good prospects in the mountains near town give encouragement to the citizens. A trail has been constructed over the mountains to the rich silver mines in the San Gabriel Cañon, and consequently Glendora will henceforth enjoy a portion of the trade of the mining district in the cañon.

AZUSA.

One of the busiest suburban towns in the county is Azusa, at the mouth of the San Gabriel Cañon. Azusa does the largest railroad business of any town on the California Central between Pasadena and San Bernardino.

During the past year business has been quite good, showing an improvement recently, since the opening of the mines up the cañon. It is a favorite outfitting point for tourists, fishermen and hunters, who go up the beautiful and picturesque cañon.

A Y is now being constructed at Azusa, and the local train which now runs between Los Angeles and Duarte will hereafter make Azusa its eastern terminal.

During the year Mr. D. Tompkins has built a handsome residence here, but beyond this no buildings of consequence have been constructed.

Considerable areas of new land are being broken and set out to fruit trees.

Real estate sales are not of infrequent occurrence, most of the purchases being made by actual settlers.

The orange crop, it is estimated, will reach 50 carloads this season, many young trees coming into bearing this year.

Taken all in all, Azusa feels confident of its future prosperity, as the resources which support the place are of a real kind and not at all transitory. These resources are fruit-raising, farming, mining and a splendid pros-

pect for manufacturing, having a splendid water-power in the San Gabriel River.

THE EAST END.

In the eastern end of Los Angeles county, on the line of the California Central, are a number of small towns, born during the boom, but which are now happily recovering from the reaction. The largest of these towns is Lordsburg, where stands a large and handsome building, designed and constructed for a hotel, now vacant, but which will soon be occupied, as the Dunkards have purchased a tract of land and the hotel at Lordsburg, and will establish a collegiate institution there.

The other towns of this section are La Verne, San Dimas and Claremont, which are all situated on the line of the California Central. Each has a fine hotel, and a number of residences, and a store or two. These towns are all the result of the boom, but the most pleasing feature about these "boom centers" now is that considerable areas of new land are being cleared and broken. Old lot stakes are being plowed up, the land cultivated and set out to deciduous and citrus trees. Large tracts are being seeded to barley and other grains.

An abundance of water in this section is favorable to agricultural pursuits.

Little or no building has been done in this section during the year. In fact, a number of small cottages, which were built here during the so-called palmy days, have been removed to sites on ranches or to adjacent towns. However, a new era of substantial progress is being inaugurated in this section, and the prospect for future increased prosperity is good.

POMONA,

THE "SIRLOIN" OF THE FAT SAN GABRIEL REGION.

Compact Sketch of a Solid Young City—The Home of "Murchison"—Lands, Water, Prices and Products.

LOCATED 31 miles east from Los Angeles, 49 miles east from the Pacific Ocean, and 35 miles due west from San Bernardino, is the thriving and comparatively new city of Pomona. The city is located in what is locally known as the Pomona Valley, but more properly known as the larger San José Valley, which, in turn, is the eastern end of the great San Gabriel Valley. The last-named valley is famous for its royal scenery, and especially for its rare fertility. The Pomona Valley is popularly called the "SIRLOIN" OF THE SAN GABRIEL.

There are few places located amid such captivating scenes as Pomona. To the west the view to the ocean is unobstructed, over a level country to the ocean; on the north the Sierra Madre Mountains, with their snow-capped peaks about nine months in the year, and their great cañons, flank the valley; on the east the San Bernardino Mountains, also snow-capped, stand like mighty sentinels, while on the south the San José hills, famous in romantic story, legend and poetry, rise as a graceful background to the scenery of the valley. San Antonio, the largest of any in the Sierra Madre Mountains, is easy of access to the Pomona people; and then there are San Dimas and Live Oak Cañons, with their rushing streams of water and millions of wild flowers all the year round. Charles Dudley Warner, the famous author and editor, says that for a combination of scenery, fertility, balminess and manifold products, he considers Pomona Valley the best locality he has ever visited in his travels over the world.

THE CITY OF POMONA

Itself is but eight years old, and its growth has been marvelously rapid. The population of the place is not less than 5300. At the last election in Pomona, 1183 votes were polled, and because of residence for a period less than one year, many citizens were unable to vote. The population consists almost entirely of Americans, nearly all of whom came from Iowa, New York, Maine, Massachusetts, Pennsylvania and Illinois.

There are two great transcontinental railroads running through Pomona—the Santa Fé and the Southern Pacific. The city has a system of gas works, two systems of domestic water, eight churches, four of them very large and prosperous churches; three newspapers—the Pomona Progress, the Times and the Register. There are three hotels in the city, one of them, the Hotel Palomares, having been built at an expense of \$112,000. There are in the place 24 dry goods, hardware, grocery, crockery, drug,

boots and shoes, music, stationery, general merchandise, millinery, jewelry, notions, feed, furniture, paint and fruit stores in the place. The city is supplied with three separate street railroad lines, and an excellent opera-house, two public halls, a public park beautifully adorned with semi-tropical plants, shrubs and fountains, and a new City Hall.

THE EDUCATIONAL FACILITIES

of Pomona are exceptionally good, and the people of the place boast of their public-school system. This consists of a large central school and five ward schoolhouses. The academic system of education is the one pursued in Pomona. Besides this there is the Congregational College, located at Claremont, three miles north of Pomona. This institution has met with uncommon success. It has in attendance over 100 students, and it has an endowment of \$72,000. The College building cost \$38,000, and a new building is now in course of construction at an expense of \$55,000. Rev. C. B. Sumner is president of the college, and there are eight instructors under him.

FRUIT-GROWING.

The industry of Pomona and her environs is that of fruit-growing, and, considering how young the place is, it is wonderful the way the land has been planted to orchards. There are now 2100 acres of oranges planted within a radius of five miles from Pomona, 320 acres of lemons, 1400 acres of prunes, 900 acres of apricots, 1150 acres of peaches, besides about 400 acres of figs, nectarines, olives, walnuts, pears and almonds. The assessed valuation of the fruit interests of this same territory was \$1,240,000 this year, and it has increased \$280,000 since April, 1888. The greatest planting of orchards ever known in Pomona Valley will take place this season. It is a low estimate that over 90,000 orange trees will be planted here before next May, besides quantities of figs, olives and lemons. The acreage of orchard property in the valley will no doubt be increased by 1400 acres before five months more pass. The market for the fruit of this valley is excellent. The Pomona Fruit Company has during 1889 canned all the deciduous fruit of the valley and has already sold every can of it in Chicago and Philadelphia. There are two orange and lemon-packing houses in Pomona, and they handle every pound of the citrus fruit. Another fruit-canning company of San Francisco capitalists are planning to locate a cannery in the place during 1890.

THE VINE AND ITS PRODUCTS—ORANGES.

The Pomona Wine Company, now one of the most prosperous companies of the kind in California, handles all vine products of the valley, and in 1889 has increased its capacity to over 450,000 gallons. The company has during the past year sold more wine in England than all other wine companies in California put together. The output of oranges from Pomona in 1889 has been 97 carloads; but, with the acreage of orchard property now coming into bearing, the output of 1890 will be not less than 185 carloads. That means an income from oranges alone of over \$120,000.

AN ABUNDANT WATER SUPPLY.

The boast of the Pomona people is the water supply of the valley and the cheap and fertile lands. The water supply is from two sources—from San Antonio Cañon and from artesian wells. The domestic water comes from the artesian wells, all of which are over 300 feet deep. The water supply from the cañon is 1121 inches, or 14,573,000 gallons every 24 hours. The artesian water supply is 1083 inches, or 14,079,000 gallons every 24 hours. This gives the valley a total water supply of 28,652,000 gallons every day. The supply is so large that much of it cannot be used, and it is allowed to run to waste even in the middle of the summer months. San Dimas and Live Oak cañons have streams of water that would furnish millions of gallons of water for Pomona Valley, but the water in them is not even used. The average cost of irrigating an acre of land in this valley four times each year is 75 cents, and many orchardists pay at the rate of 40 cents an acre.

CHEAP AND FERTILE LANDS.

The land in Pomona Valley is marvelously cheap, in comparison with the products to be had from it. Good range land—loamy, level and free from stones—can be had for \$150 and \$160 an acre, with a perpetual water right. The very best orange land here, with perpetual water right, costs \$200 to \$235 an acre. Orange orchards that are in bearing on similar land in this locality are yielding crops worth \$300, and even \$350, an acre this year. The writer knows personally 11 orange-growers in Pomona Valley who have now contracted the sale of their crops this season at the rate of \$300 an acre. C. E. White, an experienced and careful orange-grower here, has

contracted the sale of his Navel oranges at the rate of \$475 an acre; while Mr. Baldrige, who has a 60-acre Navel orange grove, has refused to sell his crop at the rate of \$460 an acre.

While the value of many town lots in Pomona Valley has fallen from their boom valuations of 1887, there are absolutely no orange or lemon or prune or fig orchards in the valley that have decreased in value per acre.

AN INVASION OF THRIFTY SETTLERS.

At this writing the announcement has been made that a colony of 123 Dunkards has bought 340 acres at Lordsburg, three miles north of Pomona, and in this valley. This colony will engage in fruit growing and will transform the Lordsburg Hotel into a Dunkard college. The coming of this careful, shrewd and industrious sect to Pomona Valley is hailed with satisfaction by the residents, for it means the settling up of a large tract of land and the beginning of the coming of great numbers of these people in a few years more.

THE FREIGHT SHIPMENTS

from the Santa Fé and Southern Pacific stations in Pomona for the past 11 months have been 5,315,000 pounds. This is 30 percent greater than for the previous 11 months. The detailed statement of the shipments is as follows:

	Pounds.
Wine.....	1,147,600
Canned fruits.....	2,237,283
Honey.....	243,000
Oranges.....	846,000
Barley.....	532,000
General freight.....	359,800

THE CLIMATE

of Pomona is always wholesome, invigorating and delightful. The people are worthy, generous and pushing, and they one and all welcome all who come to reside or visit in the valley.

LOW MOUNTAIN PASSES.

HOW THEY AFFECT OUR RAILROAD PROSPECTS.

Physical Features of the Southern Belt—An Able Paper by Dr. Widney on the Future of This Section.

THE following article, from the pen of Dr. J. P. Widney, is republished owing to its great interest and importance at this time, when so many new lines of railroad are seeking entry into California:

Radically different are the two models upon which Nature has planned the Atlantic and the Pacific slopes of the United States. Upon the Atlantic side, while she has uplifted a coast range, the long chain of the Alleghany and its continuations, she has placed it far back from the coast line, leaving a broad coast-plain, everywhere open to the sea and with no transverse ranges to divide it.

This plain includes within its long level reach the whole Atlantic tier of States from Maine to Florida. Everywhere the sea may be approached; everywhere are harbors, deep, safe; everywhere commerce may seek the sea by its choice between numerous competing ports; everywhere may be found a people who, but for old political prejudices, should be by Nature homogeneous; and back of them all the long range is open by innumerable low passes to the great interior valley of the continent.

Upon the Pacific Slope all this is reversed. The rugged coast range of mountains, with its various branches, and spurs for 1200 miles, a distance as great as from the east point of Maine to half way down the Florida coast, frowns down upon a surf-fretted base, almost harborless, with here and there a half-sheltered, open sea-landing, an *embarcadero*, as the old Spanish called it, swept by the storms of winter, hazardous in summer.

Yet in the 1200 miles Nature has given three great outlets to the sea. One where the Columbia, after forcing its way through the Sierra and the coast range, rolls seaward floods gathered in the heart of the continent.

A second, 600 miles south, where the Golden Gate opens out from the long Sacramento-San Joaquin Valley of Northern California westward to the ocean.

A third, again 400 miles further south, where the mountains break away like the shattered clouds of a spent storm, leaving the low passes and the broad plains of Southern California open to the sea.

By these three ways, and by these three only, may the commerce of the heart of the continent seek the sea upon the Pacific instead of all the many ports and the one continuous plain of the Atlantic Slope, for, by the merging and coalescing of the Coast Range and the Sierra at Shasta and at Tehachapi, these three are walled off

from each other, while the mountains wall in the continent from the sea, except at the three breaks mentioned. Between the Golden Gate and the Columbia the way is so rugged and the grades so heavy that the one line of road in existence has been years forcing its way over the mountains, while between Northern and Southern California the grades of the Tehachapi and the elevation of the pass—3872 feet—stand a continual bar to commerce. Thus is prevented upon the Pacific that coast-wise land traffic which makes the Atlantic Coast homogeneous in its trade development; and thus is enforced an isolation and a distinct and separate commercial and civil life, which will give to these communities more of the distinctive types of that old Greek life which grouped itself in clusters of allied cities about the shores of the Aegean, the Adriatic and the islands and coasts of Ionia. It is that old Greek life which is coming again to the shores of the Pacific.

Alike as these three great outlets are in some physical features, in one other, and to commerce a vital one, they are totally unlike. One of the physical laws of the earth's formation seems to be that the highest ridges of long mountain chains shall be opposite the broadest portions of continents.

The Alps in Europe, the Himalayas in Asia, and the Andes in South America, are illustrations, and the law holds good in North America. The long chains of both the Rocky Mountains and the Sierra rise as they go northward, reaching their greatest continuous elevations opposite the mid-Pacific regions of Northern California, again to drop down as they pass on to the line of the Upper Columbia plains. It is the law of grades as determined by this midcontinental rise of the mountain chains which, when commerce seeks the sea, is within the last few years changing the old lines, and deflecting transcontinental roads northward and southward to tide-level, and away from the line which leads westward to the Golden Gate.

One railroad, forced by the exigencies of war, made its labored way across the continent by the central route to the sea at San Francisco Bay. All others since then turn northward or southward to avoid the great elevations and heavy grades. Instead of the 7017 feet of the pass through the Sierra by which the solitary line of the Central Pacific reaches the sea at San Francisco, the Atlantic and Pacific enters Southern California through the Soledad Pass at an elevation of only 2822 feet, the Atchison, Topeka and Santa Fé through the Cajon at only 3319 feet, while the Southern Pacific on its way from Galveston to the harbor of San Pedro, and on a line commercially 800 miles shorter than any other transcontinental road from tide-water to tidewater, comes in by the San Geronio Pass at an elevation of only 2560 feet. These figures, much as they have meant in the fixing of the routes of transcontinental lines in the past, are yet fuller of omen for the future.

In lands and possibilities of development, the southern of these three Pacific Coast divisions is by far the greatest.

Broad and rich as are the plains and valleys tributary to the Columbia, and to Northern California, broader and richer are those which are to build up the future of the southern division. South of the great curve of the Sierra lie not simply the 40,000 square miles of Southern California, but on for 700 miles further south stretches the long line of the peninsula of Lower California, which is geographically, as it must soon become politically, only a portion of the same territory. Shut off by the gulf from Mexico, almost untouched as yet by population, the southward sweep of the cool waters of the Kuro Siwo, which gives to the whole Pacific Coast its equability, here carries the climate of the Anglo-Turton on and on until it touches the tropics.

In area it measures some 60,000 square miles, while its continuous mountain chain with, like the Apennines of Italy, the long slope toward the west, and with peaks from 10,000 to 14,000 feet high, furnishes, when utilized, water to add 700 miles in length to the orange and vineyard lands of Los Angeles and San Diego. This peninsula in its future development must, owing to the long line of the gulf back of it, find its outlet by rail northward to the low passes of the San Geronio and its vicinity.

It is this peninsula, together with that portion of the present State of California south of the Sierra, which will furnish the full territory of the new State of Southern California.

Directly eastward of the low passes of the Southern Sierra instead of the wintry plains of the Upper Columbia or the arid reaches of the Central Pacific are the great alluvial valleys of the Colorado and the Gila, the latter spanning the continent almost to the waters of the Rio Grande, with thousands of square miles of cotton and sugar-cane lands, and the summer

floods of the two rivers to water them, as the Nile waters the fertile soil of Egypt. Probably nowhere else in the northern hemisphere has the valley of the Nile so nearly its counterpart in area, in productiveness and in capacity for supporting a numerous population, as in the aggregate territories of these two great river systems and their tributaries. It is these—the plains and uplands of Santa Barbara, of Ventura, of Los Angeles, of San Diego, of San Bernardino and of Inyo, together with the long line of the peninsula of Lower California and the great interior valleys of the Colorado and the Gila, which make that empire which, almost unnoticed, is growing up on the southwest border of the United States; and it is here that, looking to the future, the greatest center of the Pacific Coast peoples must be found.

In harbor facilities for commerce, Nature has been more chary to this southern division than to either of the others. Instead of the deep waters of Puget Sound or of the Columbia, or that almost inland sea of San Francisco Bay, she has only given to the south one natural land-locked harbor, that of San Diego, with 21 feet on the bar at low tide.

Yet she has given to the South, in compensation, a quiet sea, unvexed by that persistent northwest wind which lashes the northern coast, and, in addition to this, a long chain of islands at varying distances of 20 to 30 miles off shore, within whose protecting barrier stretches for nearly 200 miles a sheltered channel with quiet roadsteads, and the possibilities of artificial harbors at such points as commerce may need, which would be impossibilities along the sterner northern coast.

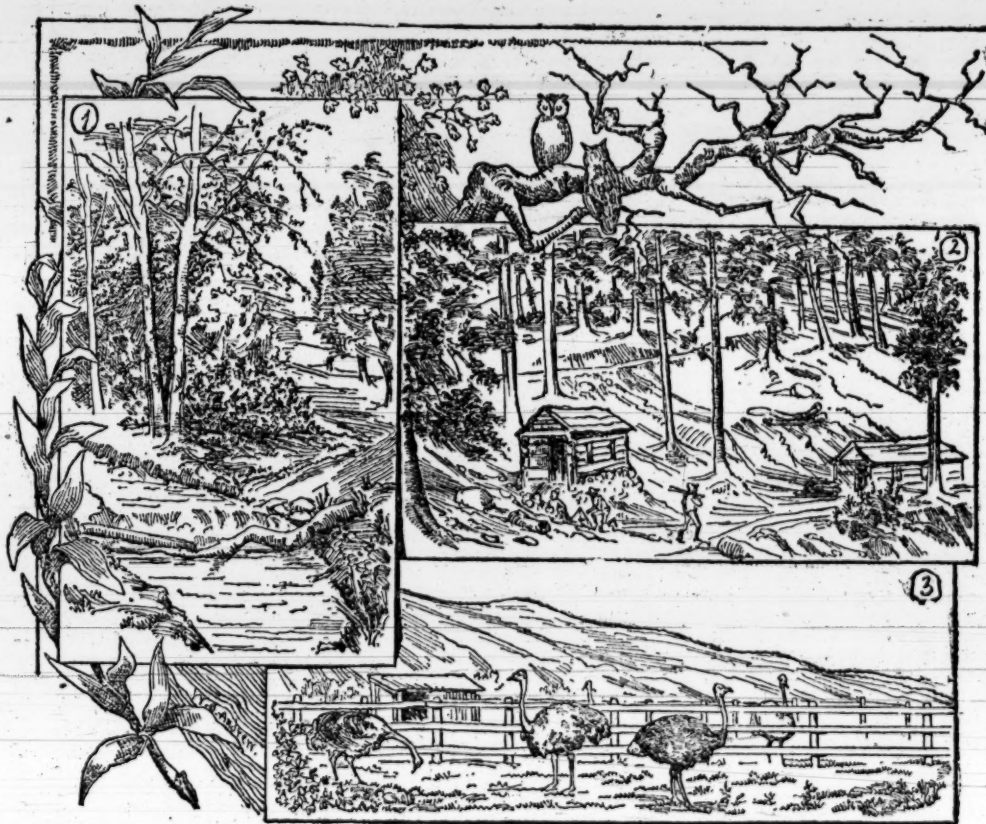
At San Pedro, the seaport of Los Angeles and the point at which the transcontinental traffic of several roads is now seeking the sea, the Government is building such a harbor. Already over \$700,000 has been expended. The work, when completed according to the surveys, will not only comprise the inner harbor, now almost finished, with a number of miles of water front and 16 to 18 feet on the bar at low tide, but will also include the outer harbor, with 60 feet of water and no bar.

When finished it makes the deepest and safest harbor on the Pacific Coast south of Puget Sound. This port, with the broad plains of Southern California clustering about it, with its low passes to the heart of the continent, and beyond these the vast, fertile valleys of the Colorado and the Gila and their tributaries, and again beyond these the Rio Grande, with the number of roads, local and transcontinental, already centering about it, and with one line now running from tidewater to tidewater by a route commercially 800 miles shorter than any possible rival, is the key to the transcontinental, China and island trade of the future. That future is already foreshadowed in the fleet of coast and deep-sea vessels now plying in its trade, and which with each year is rapidly multiplying. The work of harbor improvement will be finished none too soon, for commerce even now crowds impatiently upon it.

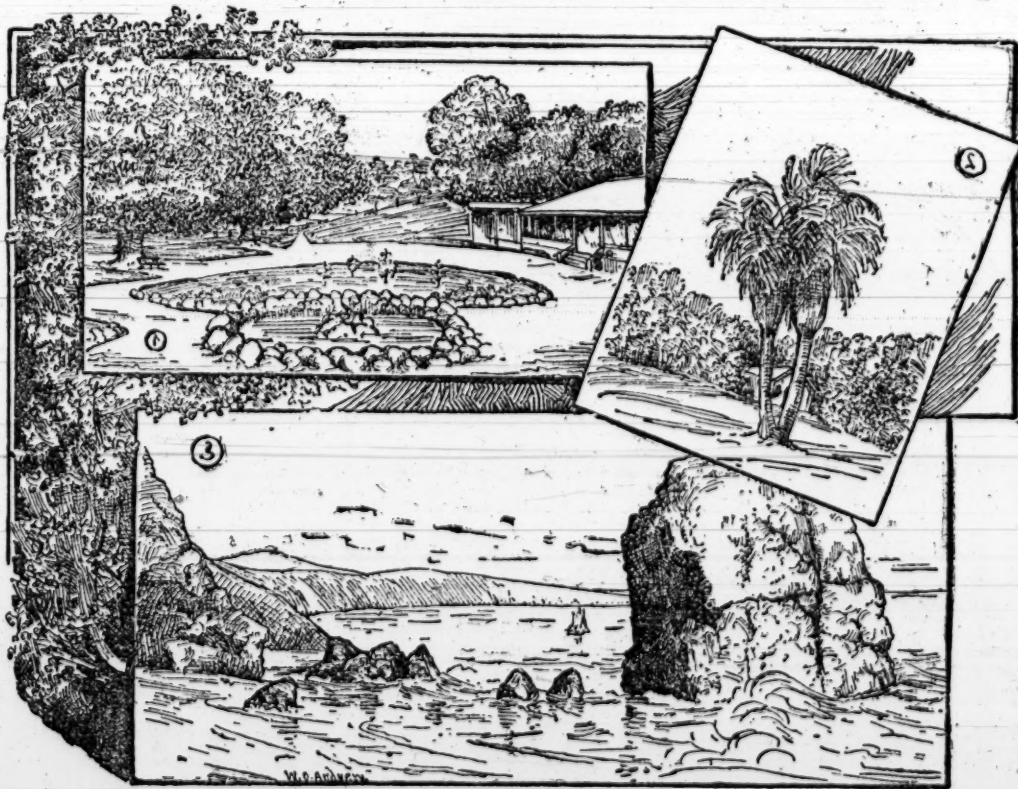
Raisins.

The raisin industry is one of the most important in the county, the rapid growth of which is demonstrated in the fact that the product is now at least 100,000 boxes per annum, as compared with 2000 boxes in 1880. Our raisins are now conceded to be equal in every respect to the best Spanish Malagas or Dehesas by London and New York importers, as demonstrated by the fact that three carloads of Fresno and other California raisins were recently sold in London, England, at prices equal to those of the Spanish Malagas. Within the next five years Fresno and the southern counties of California will be able to supply the whole of the United States with this valuable product.

SCENES IN SOUTHERN CALIFORNIA.



(1) View in San Bernardino Mountains. (2) Miners' camp on "Baldy." (3) View at Kenilworth ostrich farm.



(1) Scene at "Kenilworth" (Los Feliz Rancho.) (2) Palm trees. (3) Coast scene.



Residence of William Lacy, East Los Angeles.



Residence of ex-Mayor W. H. Workman, Boyle Heights.

LAND AND ITS FRUITS.

AGRICULTURAL RESOURCES OF LOS ANGELES COUNTY.

Vast Capabilities of the Soil—Wide Range of Productions—Sub-tropical and Temperate—Climate Fruits.

LOS ANGELES county's agricultural resources embrace everything known to a temperate or semi-tropical climate. The vast range of its soil, altitudes and other conditions make practicable the successful culture of all kinds of fruits, vegetables or grains that can be raised north of the tropics, and give it a variety of resources enjoyed by but a limited portion of the earth's surface. Not only is its geographical position conducive to this, but its diversity of mountain and plain, hill and valley

all, and a great portion of it was allowed to rot under the trees; now it is in active demand at good prices.

The lime, the third member of the family, is little raised here, except in hedges, for which purpose it is an excellent and beautiful plant. It is very sensitive to frost, and there is little market for the fruit, selling only at the bars, for which reason its culture is generally neglected.

The citron, fourth and last of the family so far as our local experience is concerned, is the tenderest of all, and the most neglected. Only a few experimental plants have been raised, just enough to show that our climate is capable of it; yet it is in good demand for preserving, and large amounts of it in that shape are annually sold in almost every grocery store in Christendom.

The fruits above enumerated require granitic soil, plenty of water for irrigation and a dry air, as free as possible from fog. The foothill region, back from the coast, is the favorite home of citrus fruits, and anyone engaging in its culture will choose such a location rather than the lower valleys.

The pomegranate is a fruit that

scorbutic, it does not seem likely that the market can ever be glutted.

The olive is of an odd family, being neither citrus nor deciduous, but is a very important one all the same, and is fast looming into prominence as one of the great products of Southern California. Ellwood Cooper has found fame and fortune in it, and the Kimball brothers are treading in the same path. THE TIMES regards figs and olives as next to oranges and raisins, the great leading staples of the future of this country.

Guavas are a delightful little fruit, agreeable to the taste and fine for table use. They are eaten fresh in much the same way as berries, and are also famous for jellies. There is a big future for them. They come in late, after other deciduous fruit is gone.

Loquats are generally mentioned in connection with guavas. They are a beautiful tree and have a very sweet blossom.

Wine grapes were one of the earliest products of the county, though more attention is now directed to raisins. They have been a very important factor in the development of the county, and, next to stock, made about the first article that we had for sale. Wine and brandy shipments date from a very early period of our history.

Raisin grapes are, next to oranges, the most extensively planted of all our fruits, and their product has become one of the most important of the county, driving out the foreign article and bringing in immense sums to the far-seeing planters who have raised them. The acreage in this fruit is increasing enormously, and it has all the United States for a market.

Berries grow abundantly and easily. Blackberries and raspberries have regular seasons, but the strawberry appears to bear almost all the year, and at this date—New Year's—is abundant in the market at 20 cents a pound. They are of immense size, fresh, plump and beautiful, and, of course, grown in the open air.

Of nuts, walnuts are the chief, and are very profitable, requiring little care and selling for a good price. They have brought this year 8 cents a pound by the crop. Probably a walnut orchard in good bearing is the best crop a man can have, requiring little or no care, almost exempt from disease or pests, and nearly always bringing a good price. They require rich land. Almonds are a more unreliable crop, being subject to great caprices of bearing. Chestnuts are getting started, though not yet thoroughly enough tested to ascertain their profit as a crop.

Bananas are occasionally grown here, in especially favored locations—that is, locations especially free from frost, for the banana really belongs to a lower zone than this, and its culture in anything more than an experimental manner is as yet problematical. Many fine specimens are found throughout the country, and they grow easily into large and beautiful plants. The ripening of the fruit is the sticking point, and success even in this has in many instances been attained.

Pineapples are a new experiment with our people. A number of plants have been imported and set, with favorable prospects. They thrive in Florida, and the probability is will do well here.

The Japanese persimmon is a fruit which but a few years ago was a curiosity, then newly imported from Japan; but it has been so extensively planted and does so well that it is now quite common and the markets are plentifully supplied with it. It is a beautiful fruit, of a bright red color, and a tree full of it is a striking spectacle. It takes a frost to ripen it and a cultivated taste to like it.

We have doubtless overlooked fruits in this review; the above are those which most readily occur to us.

CEREALS.

The cereals do well here; but as a rule are not much grown, because the land is worth more for other purposes. Land which will produce such valuable crops as oranges and walnuts, cannot be afforded to any great extent for grain, and the result is that Los Angeles county buys most of her flour from the north, where they raise just as good wheat as we can and on cheaper land. Barley is grown in very large quantities in some of the higher valleys, and shipments of it have even been made to the East for brewing. Oats are but rarely grown, though the higher valleys are well adapted to them. Corn thrives with wonderful luxuriance on the lowlands of the county, producing often a hundred bushels to the acre, and making stalks whose height it would be no use to relate to the Easterner. He would never believe it without seeing it.

Castor beans grow spontaneously when once started. They were cultivated in early times for the San Francisco market for making oil and oil-cake, but the rates of freight finally made it unprofitable and its culture was abandoned. Many of the plants

are left, however, as it is almost impossible to kill out, and along many a roadway may yet be seen, sturdy and thrifty, the disowned plants of the primeval farming of Los Angeles county. It is likely that they would still pay if oil mills were established here, so that freight would be saved, and it is quite likely that such will be done in the future and the castor bean be restored to its old rank as one of the industries of the county.

VEGETABLES.

After this review of the climate and soils of the county, it will not be necessary to say that all kinds of vegetables thrive luxuriantly. Indeed, the most of them are produced continuously, so that the time when they are out of market is hardly known to the consumer. Three crops a year of potatoes are grown, and some plants, like the tomato, do not die down in the winter, but grow on from year to year.

Peanuts do well, and their culture in that part of the county now divided off into Orange county has become an important source of revenue. They are of superior quality, too, and the having of "Santa Ana" peanuts in stock is a matter of just pride with any dealer. They are less oily than the eastern nut, and are softer and heavier.

THE DAIRY.

Los Angeles county is a paradise of dairy men. Not that it has cheap land for grazing, but that feed is so abundantly and cheaply grown that the cost of supporting a cow is reduced to the minimum. The valley lands grow alfalfa luxuriantly, and so rapidly that a crop may be mowed every six weeks. This is No. 1 dairy feed, and, so much does an acre produce that it is calculated that an acre to the cow is plenty of land to have for the dairy. Sown to beets the yield is still greater, and a statement is lately published that an acre of beets will support four cows. The advantage of keeping the animals on so little land is obvious. The capital invested in land is so much the less and there is no waste time in it, for it produces all the year round. The market, too, at Los Angeles is always good.

POULTRY.

does well in skillful hands, and many people make a handsome income from it, though we are yet far from supplying ourselves. Los Angeles county is a large importer of poultry and eggs from the East, and there is a big field at good prices, for the home producer. Eggs rarely go below 25 cents and often rise to 35 and 40. Chickens retail at an average of 75 cents and turkeys at 25 cents a pound.

BEEES.

The apiary has from early times been an important source of income. It requires little capital, the land used being usually worthless for anything else and the little workers producing their crop out of what would be valueless for other purposes.

STOCKRAISING.

was formally a leading industry of this country, but with the absorption of the land to other uses it will be readily understood that it has been almost if not entirely abandoned. This, of course applies to grazing, and not to stock farms such as Rose's or Baldwin's, where high-grade animals are bred.

FLORICULTURE.

has been given some attention, though with no practical results as yet. There is something in it for the future, however, undoubtedly, and the making of perfumes and essential oils from the countless millions of fragrant flowers that grow either naturally or are so easily produced is only a question of time when skilled labor shall have been introduced.

FIGURES.

Figures are, unfortunately, very meager, nobody having made in this county the canvass which in San Bernardino county has been made by the Horticultural Commission and the Board of Trade, and which has afforded such interesting and valuable data for that county. The Assessor's report for 1889 shows these figures:

Beehives, 13,871.....	\$15,065
Brandy (gallons), 108,637.....	30,490
Butter (pounds), 700.....	175
Calves, 4,551.....	31,440
Cattle (beef), 721.....	12,355
Cattle (stock), 17,100.....	197,565
Cattle, 4,620.....	113,340
Cows (graded), 11,330.....	295,440
Goats, 540.....	625
Wheat (tons), 1,704.....	34,040
Barley (tons), 2,692.....	16,925
Corn (tons), 1,217.....	8,080
Hay (tons), 2,379.....	37,155
Hogs, 5,750.....	19,330
Honey (pounds), 33,200.....	870
Horses (thoroughbred), 233.....	85,875
Horses (American), 22,840.....	997,985
Jacks and Jennies, 74.....	1,540
Mules, 1,781.....	86,935
Oxen, 3.....	45
Poultry (dozens), 14,708.....	36,180
Sheep (graded), 153,222.....	212,105
Lambs, 8,743.....	4,910

Country Life in Southern California.



broaden the scope of the fruits of its soil as much as would a thousand miles latitude in a level country like the Mississippi Valley. So the reader in far-off countries, perusing an account of Los Angeles' infinite possibilities, will find it to be rather that which he had associated in his mind as the resources of an empire than as those of a single county. It may be difficult for the people of narrower fields to conceive of the reality of this; yet it is literally true, and so far as the conscientious journalist from any desire to overstate it, that he would rather keep within bounds, state rather less than more than the truth, and prefer that the visitor find, when he comes, that the whole has not been told as, indeed, is often remarked upon arrival here.

To these advantages of the contiguity of two zones—the temperate and the tropic—and the diversity of its surface, Los Angeles county also adds the beneficial influence of a warm southern sea that is a conservator of both heat and cold, preventing extremes of either, and so is saved from the severe frosts of Florida and the intense heat of inland countries. The salubrious of a Mediterranean climate is added to the fruitfulness of the tropics and the pleasures of mid-winter sun-bathing to the profits of an inexhaustible fertility.

FRUITS.

First in order of prominence, as always attracting the first attention are the citrus fruits. Of these the orange is the principal, the one great staple fruit of Southern California. It is advancing more rapidly in culture than any other, increasing enormously in area each year, and, strange to say, bringing better prices as the product increases. This is just the reverse of the idea of glutting a market, and shows that there is no immediate prospect of overdoing it. This increase in price is doubtless due to an improvement in variety and the development of a greater skill in the production of quality.

The lemon is the second in importance of the citrus family, and, like the orange, has so much improved in quality under the fostering care of the Southern California husbandman that it has been raised from obscurity to prominence and favor. Five years ago the crop could scarcely be sold at

grows readily, but has a limited market, for which reason it is little raised, except in hedges, for which it is a beautiful plant and admirably adapted.

DECIDUOUS FRUITS.

All of the deciduous fruits are grown easily and successfully, though some, such as the cherry, require especially favorable locations.

The apple grows well and bears well. It appears to be freer from worm pests than formerly, and is of better size and flavor than those produced here in earlier years—evidently the result of improved cultivation. Winter apples bring a good price, the home-grown being now out of market and their place being supplied by imported ones at about 5 cents a pound.

Pears do well and meet with ready sale. They are a hardy fruit, can be kept some time and are valuable either for canning or drying. A delicious article of pear syrup was in earlier years made here, which might profitably be revived, as it was a great favorite and met with quick sale.

Peaches and apricots are the leaders in deciduous fruits, as is shown by their proportion of planting—nearly five times that of any other deciduous trees. They are especially valuable for drying, and have a market that is not confined to the United States—selling extensively in England. The demand for them seems practically inexhaustible.

Cherries do not, as a rule, do well here, but there are places where they do, as, for instance, Monte Vista, at an elevation of 1500 feet or more. They are a valuable crop, as we have few localities fitted for them, and the most that we use are imported from the northern part of the State.

Figs are a semi-tropical deciduous tree with a fruit delicious to the taste, most wholesome for the body—being the most agreeable laxative known—and of great profit. They grow readily almost without care, and bring, green, \$50 a ton at the crystallizing works.

The prune is one of the most important and valuable of deciduous fruits, and for its inimitable and agreeable acid has an unlimited demand. Many far-seeing fruit-growers have already made fortunes out of it, and there is plenty of room yet for more. The demand for trees has often exceeded the supply, and, considering the valuable qualities of the fruit as an anti-

Wines (gallons), 485,920.....	71,490
No. acres sown, 1889:	
Wheat.....	50,700.
Barley.....	31,200.
Corn.....	17,400.
Hay.....	17,040.

A. H. Denker, who has taken a commendable interest in this subject, informs us that the grain crop of 1889 was about 125,000 acres, and that for the coming year as much as that has been already planted, with a prospect that the aggregate will exceed it by 100,000 acres. Mr. Denker puts the area of the county at 3,000,000 acres, of which 2,000,000 are arable land, and he thinks that the future great industry of this county is beet sugar.

FRUIT-GROWING.

Citrus-fruit Culture and the Situation in Southern California.

Slightly paraphrasing the "Song of the Brook" in Tennyson's exquisite idyl, will may Southern California sing,

Booms may come and booms may go,
But I go on forever,
for in her winterless clime, her cerulean skies and her balmy atmosphere is the "Elixir of Life" and the "Fountain of Youth," which old Ponce de Leon vainly sought amid the malarial everglades of Florida; and in her generous and fruitful soil a promise and a guarantee to the present and future generations of independence, prosperity and grandeur, of which the denizens of less favored regions of earth have never dreamed, and which we, her favored sons and daughters, as yet fall fully to appreciate.

But granting that God's primeval curse clings to us even in this "western Eden," and that the "sweating" process must forever go on, let us look only on the "bread and butter" side of the question, and, judging of the future by the past and present, endeavor to formulate a true and proper augury of the horticultural situation as it now is, and promises to be.

In the good old days of Don Benito, Wilson and William Wolfskill, and even later, the scalebugs of various sizes, colors and names unpronounceable came to molest and make us afraid. An orange and lemon orchard was a veritable gold mine to the fortunate possessor, and the little "perspiring" that was requisite in their care and cultivation was all done by a few Indian and Mexican laborers. Then followed Mr. S. J. Rose and others with large plantings, and about the year 1870 a regular citrus "boom" set in, and everybody able to procure one thousand, one hundred or one dozen trees set them out, and sat down to dream of golden fruits and golden profits; and well was their faith justified until the advent of the terrible scale pests, white and red, a few years later. More especially the *icerya purchasi* or cottony cushion scale, with its loathsome and irresistible advance, spread terror and destruction everywhere. It is needless to relate the determined and costly fight made by most of our orchardists to stay its destructive progress, all without avail. It threatened the destruction of every other tree, shrub and flower, as well as the citrus family. Then came a vague rumor that in Australia and New Zealand there was in existence some unknown parasite that could successfully cope with and annihilate the terrible scourge, and Mr. Albert Koeble of the Entomological Division was sent to investigate. It is said that but for the energetic assistance rendered by Mr. F. McCoppin, United States Commissioner to the Melbourne Exposition, who took the responsibility of advancing the funds necessary, the mission would have been a failure. To the Messrs. Spreckels, also, of the Oceanic Steamship Company, who generously took charge of and transported, free of cost, the various consignments on the long voyage through the tropics, the most heartfelt thanks and gratitude of our entire community are due. The first three consignments were received by Prof. Coquillette in December, 1888, and January, 1889, altogether about 130 of the vedolia cardinals or Australian lady-bug, and they were at once placed in tents encircling trees infected with the cottony cushion scale upon the premises of Mr. Joseph W. Wolfskill, on Alameda street, Los Angeles, and to the faith, energy and public spirit of that gentleman, ably and zealously seconded by the efforts of Prof. Alexander Craw and D. W. Coquillette, is more largely due than to any others the credit of distributing as rapidly and widely as possible this most invaluable parasite ever discovered, the savior of the homes of Southern California. During February also, Col. Dobbins and Mr. Chapman of San Gabriel received from Prof. Coquillette consignments of the vedolia, who, later in the season, distributed many colonies among surrounding orchards. In June the Los Angeles County Horticultural Commission, having been

created, decided to establish a propagating station at the orchard of Mr. William Niles, on Washington street, and several large orange trees were inclosed with canvas houses and large numbers of the vedolia in the pupae and larva stages were procured and placed therein. Several hundred colonies were distributed free to the citizens of this county and a good many sent, on application, to Santa Barbara, Fresno, San Mateo and Contra Costa. It is estimated that at least 40,000 vedolias were distributed from this station alone. The effect was magical. Before the 1st of October the countless myriads of icerya had been annihilated, and only the empty filaments, like ghostly shrouds, were left in all the land to tell that they had ever been. Then almost as sudden as a meteor's flash vanished the vedolia. It was feared by many that they would all be lost, and steps were taken by the commission to preserve a few, if possible, in tents during the winter. As had been anticipated, the white scale in many places began to make its reappearance, probably the eggs having been hidden in the sand and soil beneath the trees, and thus escaped the search of the ravenous vedolia. But almost simultaneously reappeared the beneficent parasite, and now they may be found in almost every orchard, "attending strictly to business," and the question of the "survival of the fittest" may be considered solved.

The red scale is now the only formidable enemy to citrus fruit culture in Southern California, and it is confidently believed it will be soon under control, if not absolutely annihilated. Although no effective parasite corresponding to the vedolia for the cottony cushion has yet been discovered, it is believed one will be, and in the mean time good results are being obtained by cutting back and spraying with various emulsions, especially some of the new, cheap and simple resin washes. Best of all, it is just at this writing absolutely demonstrated that the fumigation of trees with hydrocyanic acid gas under proper conditions will destroy almost every living red, black and other scale or insect pest, and that at an expense of but from 20 to 40 cents per tree, according to size, one application being necessary only every two or three years. There is not a full-grown orange tree in Southern California that if restored to health and vigor will bear less than from five to ten boxes of fruit, and that means \$5 to \$10 per tree—from \$350 to \$700 per acre. Any horticulturist not willing to expend \$50 per acre, if necessary, per annum in fertilizing and keeping down insect pests, should at once dig up his trees and raise barley or peanuts instead. There is not the slightest doubt that the gas treatment applied to deciduous trees infected with the San José scale will prove equally efficacious. So we may now consider the terrible insect pest question settled, and proceed to plant new orchards with the fullest confidence that we can enjoy the fruits thereof. The day is dawning, the clouds of darkness and doubt rolling away. What is the promise of the future?

Probably a reasonably correct approximate estimate of the whole number of citrus trees now in orchard in the State (mostly Southern California) is about 3,000,000, or, in acres, a little less than 43,000. It is safe to assume that the number and area will be more than doubled within the next ensuing three or four years, and that in the year 1900 there will be in nearly full bearing 100,000 acres—7,000,000 trees—producing at least 25,000,000 boxes of oranges and lemons, or about 75,000 carloads. To move this immense amount of freight in 150 days (five months) would require 50 daily trains of 10 cars each. Probably before that time railroad transportation will be so cheapened that \$75 per carload to the different centers of population of the United States may be assumed as a fair estimate. "Is there not great danger of over-production and a consequent glut of the markets?" it may be asked. Not the slightest. In the year 1900, east of the Rocky Mountains, and including Canada, which we shall supply, there will be considerably more than 100,000,000 of inhabitants, giving less than one-quarter box to each person, and several millions of people west of the divide still unsupplied. In the year 1900 we shall be able to deliver our citrus fruits at all the eastern centers at \$1 or \$1.10 per box, and then they will want more than we can send them, and our orchards will continue to be worth \$1000 per acre and upward. They will want all the walnuts, prunes, peas, peaches, apricots and figs that we can send them at reasonable prices and of good quality.

Moral: Plant any or all of these trees if you have suitable soils and locations and can take good care of them. Don't be afraid of insect pests, but fight them and conquer; don't be afraid of over-production; don't be afraid of the future!

ALBERT F. KERCHEVAL.
Los Angeles, Dec. 16, 1889.

MINES AND MINING.

THE COUNTRY RICH IN USEFUL EARTH DEPOSITS.

A General View of the Subject—Valuable Minerals Lying Dormant—Fundamental Principles Discussed.

THE interest in all that tends to promote the development and utilization of visible resources, now lying dormant around us, still (with unimportant exceptions) lacks proper appreciation, and little progress is being made toward their preparation and manufacture. If some seemingly commonplace thing is required, may be but a little chalk, a drug store is sought, the purchase is made, but who stops to make inquiry where the article came from. We might unthinkingly say it is a small affair and not worth our while to give it thought. Despire small things and fail to aggregate them, and we neglect the grasping of the possible importance that is in them as a multitude, and that astonishes us when we begin to figure their variety and quantity, and our daily requirement of them in the affairs and wants of life. Suppose as a matter of curiosity an enumeration of some of these small things be made, such as the chalk, as an illustration. Its uses are many, and in order to demonstrate intelligently, not alone its especial importance—for it is small—but by analogy it leads to the consideration of other small things in great numbers, and, as a list, turns out to be formidable.

Its uses are for face powders, silverware polishing, drugs, chalk-lines in carpentering, for calceining walls, and many other uses. One pound to each inhabitant per year would likely be a very conservative estimate. For 100,000 inhabitants, at an average of 5 cents a pound, would be \$5000 per year. Plumbago for stove polish, electrotypes facings and other uses, say for the same population at only three ounces to each inhabitant, would be 18,750 pounds, which at 15 cents would be \$2,812.50. Baskets of all kinds, say only one to every 10 persons, at 30 cents each, \$3000. Bottles, large and small, tumblers and ordinary glassware, at \$1 per year only, for each inhabitant, \$100,000. Plates, cups and saucers, pitchers, etc., for a family of five persons, say 20,000 families, at \$5 per annum each is \$100,000. Writing inks, say 5000 large bottles, averaging 50 cents each, \$2500, small, 10,000 at 10 cents, \$1000.

How quickly these figures run up to colossal proportions! Only a commencement has been made and we have \$214,312 per year for articles that could be manufactured here, and still the sum named is only a very small portion of a vast aggregate.

It may be said we have no raw materials about us to make these articles! Let us see: There is a deposit of the finest natural chalk near Oro Grande that is so pure and smooth that it is fit for face powder, even without treatment. Of plumbago there are several large deposits of suitable quality. Willows of the kind used in basket-making can be grown here in any quantity desired. Sand of a quality pronounced by experts to be ample for most of the arts of glass-making is plentiful. Kaolin of unusual purity and very white, for making white table queensware, comes to my laboratory frequently from points not far from this city. So it is with most of the raw material needed to produce many of the wares and things used by us in our daily affairs. If some manufacturer would produce a number of articles instead of one, say quite a variety of small things, as a whole they would cover a larger field and enable such works to prove profitable by reason of variety.

For instance, suppose a small works started on a variety of materials of a somewhat kindred nature, i.e.: Chalk prepared for various uses; plumbago, stove polish, etc.; blacking for boots and shoes; French chalk for tailors' and shoe dealers' uses; plaster of paris (gypsum) for gas chandelier center pieces, wall finishing, etc. Here is a group of materials that could be combined under one roof and a good deal of the machinery plant would handle at least three of the products without separate appliances. While, maybe, any one of these articles, except the plaster of paris, would not pay as separate productions, there is no question but what combined as a whole, they would be highly remunerative.

During the last year some attempts have been made to produce a marketable hydraulic cement, but the product has not been satisfactory. Materials, so far as analysis proved, of a proper

quality, somewhat widespread over several adjacent counties, were used in these trials. Most of the experiments made were based on the products of one locality or deposit by blending lime, silicates, alumina and magnesia, in supposedly proper percentages. Some very good appearing cements were produced, setting under water, but in the course of a few days or weeks the set came out, and disintegration followed.

Whether these failures were the result of lack of practical knowledge or not on the part of the experimenters, or improper materials being used, would be difficult to determine.

A cement will likely be successfully made here without doubt, but not, probably, from materials all coming from the same place or deposit. It seems to be well settled that the proper grade of stone will have to be taken from several localities, producing thereby a blending that would reduce to a quality desirable.

SMELTING WORKS.

Considerable talk has been indulged in relative to establishing smelting works at or near this city, in case of the construction of the Southern Utah Railway, with a connection to our tidewater. That railway line would traverse a great mineral field, and sufficient in extent to justify a reduction plant here.

There are features, however, in connection with this subject that it would be well to consider.

If, as has been stated, great coking, coal and iron measures are to be tapped by this road, would not extensive works likely result at the mines for utilizing the iron and coal, and would not reduction works to cover the ores carrying gold, silver, lead, copper, etc., naturally cluster there, and would it not also be natural for a railroad company to foster and encourage them at that point, instead of allowing these products to come here, where at least two roads would seek to divide the transportation of products to eastern markets? Whereas, by the other course, they would virtually monopolize coal, coke, iron, and every kindred industry, including transportation.

The Pueblo (Colo.) works reach out almost to our doors in their grasp for precious metal ores, having a freight rate covering some 1500 miles, at \$9 per ton. Under ordinary circumstances, we could at least hope to control transportation at a living rate on ores over the Southern Pacific and Santa Fé railways; but the Utah project would again frustrate that possibility by controlling the fuel we would absolutely need for a successful solution of the question.

Local efforts are being made to manufacture plaster of paris for use here. The trouble has been to find a sufficiently pure gypsum of uniform white color and quality. Many deposits have been prospected and analyzed, but most of them carried either silicates or iron in too great percentages to answer. A number of mines, however, are available, and it is confidently expected that a good, marketable article will soon be produced. Orchardists and agriculturists will soon find use for ground plaster also for regulating soils.

MINING

for the precious ores of gold and silver has been more brisk during the last few months than for several years. Capitalists of this city are shy of mining ventures, and a property that would command respect must be meritorious beyond question. Most prospectors do a little work on a find, generally consisting of a hole a few feet in depth, and, if an assay shows the ore to yield a paying amount, jump to the conclusion that they have "struck it rich," and have a mine. As a rule, they pull up stakes and start for some city or town to sell their find. In the majority of cases they fail to enlist any capital, for the reason that not enough work has been done to prove that they own even a reasonable prospect.

When this hardy, and, as a rule, hard-working class, realize that no one will pay anything for a little hole in the ground, it will be better for them. If the miner of this class will do more work and assure himself that he has a likely prospect, by development work, he can sooner impress the man of capital to help him out and appreciate honest effort. In mining matters, capital rightly directed, by brainy men, can bring us at least a share of the good things that may be unearthed within a reasonable radius of this city. Money must be forthcoming to so direct and so influence the management of mines tributary to our city, as to bring the bars of bullion to our credit. If we are farsighted and alertly cover grand opportunities in time and before others more enterprising cover the ground, vast commercial scope can be subserved and turned to our use and benefit.

EXCHANGE

of the grain, fruit, wines, and products of our fields and manufactories

must be brought about with the miners. We should reach out, especially to Arizona, that land of sunshine, gold and silver. A Territory that, without doubt, has richer and more varied mineral resources than any other equal area, as a whole, on this globe.

Los Angeles can be made, as it is, the natural trading point for this territory, but it will be lost to us if we fail to use well-directed endeavors to control it.

Already eastern tradesmen, eager and farsighted, are making successful efforts to cover this rich field. They put their money back of their efforts. They invest in good mines, in cattle ranches, water canals and lands, railroads and town property, and in time will reap a reward that would be ours were we farsighted and wise.

TALK AND ACTION.

Our fair city has a commanding advantage, and can conquer the world around her, but it means work and capital turned in proper directions and managed with skill and reasonable foresight.

Our citizens organize strong bodies of business men, made up on principles of power, influence and good qualities, but they figure too near home and linger over the ashes of a spent boom, and wait for a rise in corner lots, without a resort to heroic, widespread and reaching practicable enterprises.

Good resolutions, on paper, sound all right, but they fail by repetition to heartily command attention, as they cannot bring about desired practical results.

Of one thing, our business men can rest assured, and that is: No manufacturers can see their way clear or depend upon uniform results without cheaper steam-making fuel. It would pay to combine and purchase a coal-property north and the ships to transport it to this city, today, and dispose of the fuel at cost to consumers on a cooperative basis. Men who combine for their own protection will succeed, whereas an individual would be powerless alone. This one vital drawback is costing this community untold millions in drainage of money needed at home. We transport great vans of goods and wares from abroad, simply because there is a lack of appreciation and effort to produce them here. Begin at the right end of things and the remedy applies naturally.

We cannot hope to quickly accomplish this and bring about these changes, but a beginning can and should be made. Good times are wanted. Bring about self-sustaining measures of a nature that is not all consumers and no producers.

Nature has done her share for us. Witness our natural and as yet untouched resources, scattered with a lavish hand about us.

Wealth in our fields, in the mountains and hills. Our proximity to the ocean, the free highway of the world; our climate; the scenic beauty that surrounds us, and multitudes of almost unseen and unappreciated blessings about us on every hand, should stimulate us to something grander and nobler than mere idleness and speculation.

JOHN P. CULVER,
Civil and Hydraulic Engineer.

OUR MINERAL RESOURCES.

A Particular Mention of Southern Mines and Mining Districts.

The mineral resources of Southern California are both extensive and varied. Besides the precious metals, we have large deposits of copper veins and deposits of lead; mountains of iron and salt; and veins of coal and tin; lakes and deposits of mineral salts; building material, clay, plumbago, hydraulic lime and limestone, marble, gypsum, etc.

This extremely diversified mineral wealth is scattered throughout the southern counties, and affords lucrative employment for a very large number of men.

Besides the minerals, we have several petroleum basins, of which that near Newhall and the Puente basin are the most valuable and productive at present.

Before referring to the precious metal industry, some reference will be made to the various other economic deposits of minerals in this end of the State.

IRON.

In the Sierra Madre Mountains, near the cañon of the Tejuca, are large veins of iron ore, which must some day be utilized. These ore bodies are situated in the midst of an immense forest of fine pine timber, and if the ores are not smelted on the spot with charcoal made from the timber, a railroad will be built to recover both.

In San Bernardino county, about 16 miles from Daggett, is a veritable mountain of iron ore of splendid quality, and though at present of little value, it cannot always remain so.

In San Diego county, also, are large

deposits of iron ore, all of which will attract attention in time.

COAL.

Our coal mines are not as extensive as we should like to have them, but good coal is being mined near Elsinore, which is finding its way to the market and meeting with favor. There are also veins of coal near Riverside, but nothing of note is being done on the property at present.

COPPER.

No copper is being mined in Southern California, at present, though there are copper-bearing veins of great prospective value in San Bernardino county, in what is known as the Ord district.

A lead of quartz, carrying considerable sulphide copper ore, has been discovered near Wilson's Peak, in Los Angeles county, but it must be rendered more easily accessible before it has any value.

There are numerous veins and deposits of copper elsewhere in this part of the State, but the present low price of copper does not admit of their being worked profitably.

GRAPHITE.

A deposit of graphite, or plumbago (black lead), has been found near Crescenta Cañada, but little has been done to develop it. Graphite is not an uncommon mineral, but it must be very pure and occur in large quantity to have any value.

LEAD.

Lead is a metal much in demand in this part of California, and while there is an abundance of lead ore scattered about the southern counties, the most of it is situated too far from the various lines of railway to be of much value.

About 23 miles from Newhall, on the Santa Barbara branch of the Southern Pacific, in Castee Cañon, a mine is being developed which carries a large amount of lead ore. The ore also assays quite well in silver. It is quite possible this mine, called the Silver Mountain, may be equipped with a smelting furnace the coming year.

All about Oro Grande are deposits of lead ore which promise to make quite a large output. The mountains near Barstow also contain lead deposits. In fact, the amount of lead ore in that part of San Bernardino county is so large that a smelting plant is talked of at Oro Grande.

The Resting Springs and Panamint mines also contain large quantities of lead, but these ores will not become available until more convenient transportation than 100 miles of freighting across the desert is afforded.

TIN.

The tin mines of the Temescal, though undoubtedly of some prospective value, are not being worked beyond the necessary assessment.

GYPSUM.

During the past few months gypsum has been in demand, and the prospect is that a company will soon commence manufacturing plaster of paris and fertilizer from the deposits near Acton.

There are quite a number of gypsum beds of greater or less value in Los Angeles county, and it would seem that each of them might be made valuable if they were in the proper hands.

SALT.

Salt is obtained at quite a number of places in this part of the world. A large amount is manufactured at the seashore at Redondo Beach and elsewhere, but the larger amount is taken from lake beds and artificially evaporating saline waters from artesian wells. There is a large concern manufacturing salt on the line of the Southern Pacific road in the Colorado Desert, near Volcano Springs.

On the Mojave Desert, a few miles from Resting Springs, is a good-sized hill of salt, and it is reported that near the Colorado River below Yuma there is a veritable mountain of this valuable product.

BORAX.

This mineral is mined quite extensively in San Bernardino county, both from lake beds and from a vein in the Calico Mountains. The annual product aggregates a large sum.

BUILDING MATERIAL.

The number of places where building stone and lime may be found is so large that it would require too much space to give them in detail. Suffice it to say that every county in Southern California has quarries of sandstone, lava rocks, lime, marble and excellent granite that cannot be surpassed by any imported article of the sort.

PRECIOUS METALS.

Southern California is the natural treasure-house of untold millions of golden and silver wealth. Almost every range has more or less good mines, and nearly every hill on the desert is the repository of hidden treasure.

Brief mention is made of the most

promising districts, the field being too broad and the space too limited to deal to any extent with individual properties.

SILVER REEF.

One of the most remarkable mineral districts in the world is that known as Silver Reef, in the Black Hawk mining district, in San Bernardino county. The reef was discovered in May, 1888, by Pasadena parties, who staked out and have since developed a number of claims. Geologically the formation has but few counterparts, being an immense bed of calcareous and silicious material, evidently a deposit from hot springs. The formation is about 100 feet in thickness, and has been developed to nearly this depth by shafts.

The ore occurs in zones or bands of mineralized calc-spar, and is chiefly chloride and chloro-bromide of silver, running from 30 ounces up into the hundreds of dollars per ton. This camp is one of unusual promise to the small investor, as high-grade rock can be shipped at comparatively small expense to Oro Grande and elsewhere. The present outlook for Silver Reef is most flattering, as abundant capital is being interested, and within the coming year considerable shipments are anticipated.

ORO GRANDE.

A small town on the California Central, is rapidly assuming airs of importance. The discovery of what appear to be large and valuable mines in the vicinity of the town have given a decided impetus to business of all kinds. Oro Grande seems to be the center of quite an extensive mineral district. To the west of the town are the now quite famous Clinker and General claims. These produce chiefly lead and silver ores, and promise to become large producers. They are owned by a syndicate of Los Angeles gentlemen.

Quite near Oro Grande, on the east side of the railroad, is a lime quarry, where limenock has been broken for some time for burning in kilns near the railroad. During the past year a man named Collins discovered silver bearing carbonate of lead and galena in the lime quarry, and the property is now being developed as a mining claim.

The Adams Bros.' gold mine, about 12 miles east of Oro Grande, has already earned quite a local reputation as a producer of pay rock. The ore is base, but carries about \$50 per ton. There is considerable talk about building a smelter at Oro Grande to treat the ores of the district.

ACTON.

The gold district of Los Angeles county is Acton, located about 55 miles from Los Angeles on the line of the Southern Pacific Railroad. There are several producing gold mines in this camp, the most prominent of which are the Red Rover and the New York mines. Both of these properties are equipped with mills and are grinding out the yellow metal, shipping about \$10,000 monthly.

On Mt. Gleason, eight miles southwest of Acton, some very promising gold prospects are being developed and machinery put in to thoroughly test the property.

THE SAN GABRIEL CANON.

The silver mines in San Gabriel Cañon have been attracting considerable attention lately by reason of the discovery of silver ore of extremely high grade.

The prominent mines of the group are the Kelsey and Mint and the New Year's Gift. The former claims were owned by a Los Angeles and eastern syndicate, which recently bought the latter claims from Messrs. Cullen and Miller. The "O. K." located south of the Kelsey, is also a promising property, and has considerable development. The ore is chiefly native silver and silver glance, with some chloride in a gangue of heavy spar.

The Victoria mines, owned by an English company, are opening the old Zapata and Winston mines, and have recently built a very complete 10-stamp silver mill. The ore is also of good grade, and the property has the appearance of becoming a bonanza, at least so the company claims.

At Glendora a strike was recently made on the hills back of the town, which may develop something valuable. A mill is being constructed in a cañon near town, and the owners of the property are showing their faith by their works. The result of this expenditure of capital in machinery and development is looked forward to with great interest.

NEWHALL PLACERS.

During the year the placer mines in the vicinity of Newhall, in Los Angeles county, have been worked with renewed vigor. The principal work has been in Placerita Cañon, where hydraulic machinery has been in operation for several months; but it being found that the pumps and engines were inadequate, they are about to be replaced with a heavier plant, and during the coming year it is expected

that considerable gold will be the outcome of these improvements.

A number of Mexicans and "coyote-hole" prospectors are taking out gold from almost every gulch in this region about Newhall, including Dead Man or Los Murtes Dry Cañon, Soledad and the San Francisquito. Though the amount of gold taken out by any one of these prospectors is not large, in the aggregate the result of their combined labors makes quite a large sum annually.

The placer mines in the San Gabriel Cañon also have produced a considerable amount of gold during the year. A more systematic method of operations would doubtless result in opening valuable alluvial deposits. It will be necessary to control the water and to operate the mines in a manner which will produce the best results.

In Holcomb Valley some placer gold has been mined during the year, but the lack of a dumping-ground is a drawback to these mines, which will forever preclude any extensive operations there without an expenditure of a large amount of money.

Placer mines are scattered here and there about Southern California, but it is preëminently a region of leads and not placer mines. There is one famous locality in San Diego county, in the Cargo Muchacho Mountains, in Pindero Flats, where gold nuggets were picked up on the surface of the ground, but these placers have joined the boom; they no longer exist.

CALICO DISTRICT.

The Calico Mountains, located in San Bernardino county, produce the largest amount of silver of any mining district in the State, at present.

Much has been said and written of Calico, but much evidently still remains to be learned concerning the nature and extent of the ore deposits of the district. Calico is a camp which has always stood on its own merits, paying its way from the outset, and until the mines were opened and had produced millions in silver but little outside capital was interested. The developments of the past year have been of a very gratifying nature to the miners, as the mines show a richness and permanency which it was formerly believed were not among the possibilities.

The extensive ore chambers opened in the Waterloo, the Occidental and Oriental have opened the eyes of the world to the fact that Calico has bonanzas, and big ones, too.

The output of the district, as nearly as could be learned, has been for the 12 months past about \$1,100,000. This estimate includes all the output of the companies and chloriders. There are operating on Calico ores four stamp mills, having a total of 115 stamps, with a crushing capacity of 350 tons every 24 hours. The ore is a free milling chloride of silver in a gangue of porphyritic rock, which is usually quite soft and crushes rapidly.

The mills of the Waterloo Company are at Daggett, about six miles distant from the mines. A narrow-gauge railroad connects the mines with the mills. The cost of transportation, it is stated, is but 12 cents per ton.

Calico has still a bright future and will produce many more millions before the camp is declared "petered."

Despite the encouraging results of "deep mining" in Calico, none of the mine-owners have had the courage to test their property beyond 300 or 400 feet. In most mining camps a property is scarcely considered opened until this depth has been attained, at least. Should a deep shaft (1000 feet or even 2000 feet) be sunk, it is quite likely the deposits will be found to continue to that depth; and it is possible that water may be encountered (the mines are now perfectly dry); and, while this would necessitate pumping, it would afford enough water, in all probability, to operate a large number of stamps.

When the mines of Calico are opened in this way they will have an assured permanency and value which can never come as long as the present "hand-to-mouth" system is engaged in. The mines are exploited in a manner which is calculated to convey the impression that they have no future, when every indication points to large and valuable deposits in depth.

IN THE DESERT.

There are hundreds, even thousands of claims scattered throughout the mountains of both the Mojave and Colorado deserts, many of which are never heard of through the columns of the papers, but many of which possess real value, and only require capital to make them productive; while others await the coming of a railroad to make them profitable. All along the line of the Atlantic and Pacific and the Southern Pacific railroads are mountain ranges, in almost every one of which are valuable deposits of precious metals.

Some of the prominent districts on the Atlantic and Pacific are the Victor, Barstow, Kramer, Harper, Ludlow, Lovic, Amboy, Bagdad and Fenner. In the Providence Mountains, near Fenner,

some very encouraging developments are in progress. The famous Bonanza King of that district, it appears, is not the only valuable property in that section. The Cambriomine is now beginning to attract attention, and bears a good reputation. At Bagdad there have been small veins of high grade rock opened, but the extreme difficulty and expense attending operations in that vicinity have had the effect of holding any considerable development in check.

Some gold prospects near Harper and Kramer, on the line of the Atlantic and Pacific between Barstow and Mojave, are looking extremely well, and may be looked forward to as producers during the coming year.

On the line of the Southern Pacific, the old Mexican mines near Twenty-nine Palms have been investigated by Los Angeles and Pasadena capitalists, and results may be looked for in that direction ere many more months roll by.

About six miles from Ogilby Station, and nearly 30 miles from Yuma, in San Diego county, is the range of lofty, rugged hills called the Cargo Muchacho Mountains. The principal mines of the district are the Cargo Muchacho (boy's load), the Pasadena and the S. B. Tubbs property. These three mines are located on the same vein, and are of unusual promise. The Cargo Muchacho has been opened to the depth of nearly 400 feet, and has now considerable pay rock in sight.

The Tubbs mine is only a prospect, opened by about 200 feet of shafts and tunnels, developing a good-sized vein of free milling quartz, and is one of the most promising claims of the district.

The Pasadena mine is owned by a corporation of Pasadena gentlemen, and is also a fine piece of property. Early in the year considerable rock was milled, but owing to the great expense of transportation the management concluded to continue the work of development, pending the erection of a stamp mill near the Cargo Muchacho mine and within two and a half miles of the Pasadena mine. It was thought this would very materially lower the expense of milling their rock and leave a handsome margin of profit. As the Cargo Muchacho mill is completed, something tangible may be looked for from both the Pasadena and Cargo Muchacho, and also from the Tubbs mine. The Padre y Madre mine, located near the above-described property, and which gave the district its first fame, is idle, though the work of representation is kept up each year. The Cargo Muchacho district labors under the disadvantage of being a long distance from the water, but to some extent this difficulty will be removed by the completion of the 14-mile pipe line and pumps of the Cargo Muchacho Company, water being pumped in from the Colorado River.

At Pinacote, near Lake Elsinore, the Good Hope mine is being reopened, and it is quite likely that once famous and rich vein will again become a producer.

THE BLACK HAWK.

In the Black Hawk mining district a large and apparently valuable mining property is being opened by the Valley Gold Company. The company owns a number of claims and is putting in machinery to thoroughly prospect it. The mines are those formerly owned by Messrs. Cook and Leach, and are of great promise. The rock is gold-bearing, free-milling, and some of it extremely rich. The gold occurs in a calcareous rock, with some quartz and considerable iron oxide. At Rattlesnake Cañon and Lowe Valley rich finds in a similar formation are reported, and the entire district is one of unusual promise. The Black Hawk Company has abundance of means, and will thoroughly test its property before putting up a large mill, thus avoiding a mistake too commonly made.

The Black Hawk management is in careful hands, and if there is anything in it they are the ones to bring it out; and it would not be in any manner surprising if the present year should see the dull-yellow bars going over the road from this property, in size and number that will astonish the northern end of the State.

W. H. STORMS.

The camphor tree grows 50 feet high, and from it is extracted the camphor of commerce. It is easily grown from seed. . . . The tulip tree, said to be the most stately tree in North America, belongs to the same natural order as the magnolias, and is an ornamental tree of the first order. One recently stood near the city of Louisville, 130 feet in height.—[Citrograph.]

The Visalia Delta whispers a word of warning to those getting English walnuts for seed: "Don't buy the clean, bright-looking nuts that are usually sold for eating, as they are made to look handsome by scalding, which destroys the germ."

AN APPRECIATIVE VIEW.

OUR POST-BOOM CONDITION, AS VIEWED BY AN OUTSIDER.

The Substantial Resources of Los Angeles That Keep It Moving Right Along in the Procession of Progress.

RECENTLY the San Francisco Chronicle published the following article on Los Angeles, which is one of the most concise and readable statements that has been given to the public on this subject. It is especially valuable as expressing the views of a San Francisco man who is able to consider the subject *aliunde*, so to speak, treating it calmly and dispassionately. San Francisco has generally been disposed to view Los Angeles "with a critic's eye," taking good care not to concede too much to her southern neighbor, in some things her rival. With this understanding, the following extracts will have greater weight with people abroad than the same statements prepared from a purely local standpoint, and for this reason they are given somewhat in extenso.

[Correspondence of the Chronicle.]

LOS ANGELES, July 30, 1889.—A boom in the majority of cases is based on normal healthy conditions, though in itself and its results it demoralizes and produces financial depression. To the superficial observer and to some newspapers who, perhaps, thought it profitable to assume the same view, Southern California in general and Los Angeles county in particular, has of late been regarded as being financially and progressively torpid, if not moribund, because it is convalescing from a severe attack of boom mania.

But why did the boom come? What caused it? And is this county even torpid as a result?

The boom came because of the information suddenly spread through the country that here was a land of wonderful productiveness, with a paradise sun and air and filled with natural resources waiting but for the aid of capital. The old resident here knows that this boom which appeared to spring out of nothing and end in nothing really began back in the seventies. In '75 and '76 colonies began to spring up, and the "excursion" system of immigration was inaugurated. The "climate refugees," or "pulmonary pilgrims," as the health-seekers were termed, began to come, first by the hundreds and latterly by the thousands. The progress was so rapid that the people began to be excited; the excitement grew into frenzy, and for a few months the frenzy developed into mania. No scheme was too impracticable; town, land and water, harbor and railroad companies were formed and incorporation papers were left with the County Clerk faster than he could record them. But it is needless to again describe the mania; it is familiar to most Westerners, and, being cured, has no vital importance now. The point of interest now is in what condition is Southern California.

To give the reader an intelligent answer, it will suffice to discuss the present status of Los Angeles county, which is so closely connected in all ways with the neighboring counties as to form a barometer indicative of the condition of this rich, ambitious section of the State. In round figures, this county has 3,080,000 acres of land. Today 2,000,000 acres are tillable, but in the near future the large systems of water development and storage reservoirs will add to that several hundred thousand acres which are now practically useless. There certainly is land enough to produce sufficient to make all branches of commerce prosperous if the land is good. In this regard nothing can be more eloquent, more convincing than figures. From statistics collected by the Chamber of Commerce, the showing is made that in 1883 this county produced 500,000 boxes of oranges, 100,000 boxes of raisins, 100,000 tons of grapes, 3,000,000 gallons of wine, 1,500,000 gallons of brandy, 1,750,000 bushels of barley, 1,500,000 bushels of wheat, and 2,000,000 cans of fruit. During the past season 380,000 fruit trees have been planted, and the wheat and barley acreage increased by 70,000 acres. "But," says the eastern farmer, "you people want a small fortune for your lands. Farmers cannot afford to pay you \$100 to \$1000 an acre for land. We can get farms in the West for \$2.50, \$5 and \$10 an acre." Two or three years ago there was some truth in this statement. Lands were held at ridiculous prices, because they were one day sold at hundreds of dollars per acre, and the next, perhaps, at the same amount per front foot. As a financial proposition, how-

ever, there is hardly an acre of tillable soil in the county which will not make large returns on a price of \$100 per acre. It is estimated from the yields of the amount of soil now tilled that the 2,000,000 acres of available farming land in the county is easily capable of producing an average annual yield of \$40 per acre, or the comfortable annual income of \$80,000,000. But what is the price? Here recourse must be had again to the statistics of the Chamber of Commerce. This institution has just issued a circular prepared carefully of cheap lands, which are for sale in the county. It is not in any degree an advertising dodge, for the names of the owners, or the agents, or even the exact location of the lands described are not given. It is the result of personal investigation on the part of the officers of the chamber, and is solely printed with the object of showing that the farmer or would-be rancher of small capital can find ample opportunity of investment. In all, 41 pieces of land, comprising 541,419 acres, are described, ranging in price from \$150 to \$250 per acre. There is but one farm mentioned at the highest price, and that is one of 160 acres, supplied with buildings, and netted last season \$5000. The lowest priced is good grain land, supplied with mountain water and located in the arid belt. Other prices between are \$8, \$12, \$20, \$30 and so on, the average probably being about \$25. In preparing this circular Secretary Higgins prefaces it with some very sensible remarks, from which are taken the following:

"These lands can be bought, as a rule, in any sized tracts. Very fine, choice lands at about \$25 per acre, in close proximity to railroad stations, towns and cities, enabling the farmer to market his produce easily, with long time and low rates of interest, are certainly reasonable, especially when it is taken into consideration the variety of crops that can be grown; the enormous yield and the wonderful climate, which permits outside work all the year. . . .

Two crops of vegetables and grain are common in this section, as well as six to seven crops of alfalfa (clover). This should be taken into account when making comparisons with other lands. In raising citrus fruits the receipts per acre are so many times more than the amount received from eastern farm lands that comparisons are out of the question; yet we have in this list the very finest of citrus fruit and grape lands."

These figures show that land-owners have come to their senses, and that the farmer who pays three prices buys the cheapest land in the country, for the yields are something that would astonish even a central Western or Manitoba farmer, while to the far eastern tiller of the soil the figures seem simply impossible. Corn frequently runs as high as 100 bushels an acre, and, by the way, half the corn used in this State is grown in this county. The average yield of barley, as figured by the expert, D. K. Edwards, is placed at 124 cents per acre and 12 cents of wheat. To make the possibilities plainer to the farmer unused to estimating in cents it may be well to say that 60 bushels of barley and 40 of wheat is nothing extraordinary, though this is in no way a grain county. Alfalfa will return \$50 to \$75 per acre annually, or in pasture one acre will keep a cow fat all the year. Raisin grapes from the age of 2 to 3 years will average \$100 per acre. There are in and about Riverside 1000 acres of grapes which last year made into raisins produced an average net return of \$168 per acre. Orange trees in full bearing return on the average \$150 net per acre; English walnuts from \$200 to \$400, though these require from seven to nine years to come into profitable bearing. With these economic conditions is it not self-evident that this county, with or without a boom, must be prosperous, rich and progressive? It cannot be torpid.

The boom reached its crisis in 1887, and in a few months was a dead monotony. January, 1883, found the people a little dazed, realizing that their fictitious fortunes had melted away, that city property located out on uninhabited plains was only worth per acre what they had purchased it for by the front foot. There was a reaction, a depression; accounts had to be adjusted; puzzling problems of second and third payments on lots and agreements to convey had to be arranged, but divested of its tinsel, its glitter of Brummagen pretenses and its blustering brags, the boom did not amount to much. Before and since the country has advanced just as rapidly as is consistent with healthy conditions. All that was good in the boom remains; all that was evil has disappeared.

As there is no Building Commissioner or Bureau of Statistics on such matters, the computed figures of amount of building done in Los Angeles city and county cannot be shown with exactness, but the amount of money invested in public and private improvements during the year and a half just past cannot fall far short of

\$20,000,000. The Los Angeles Herald, a conservative journal, printed a list of buildings actually erected during 1888, which is mainly confined to the city, and which is far from being complete. No edifice costing less than \$10,000 was noted. The list is footed up as follows:

Business blocks	\$3,514,750
Public buildings	6,799,300
Residences	498,700

Total \$10,812,750
To that amount should be added for public improvements.

Waterwork extensions	\$285,000
Public school buildings and sites	200,000
Three viaducts across the Los Angeles River	300,000
Parks and boulevards	150,000

These figures make a grand total of \$11,657,750 for the 18 months. To this, if the amounts expended on less costly buildings and on suburban and rural homes were added, the total of twenty millions would be very soon reached, and in all probability exceeded.

All this, it should be borne in mind, has been invested since the boom. While this part of the State has been represented as in a decay, as bankrupt, that amount of money, millions of dollars, has been invested by far-sighted business men, and still the work goes on. On almost every street in Los Angeles can be seen fine edifices under construction. Here are homes that rival the palaces of Nob Hill or the avenue. Senator L. J. Rose has in his house stained-glass windows and frescoes which are worth a journey across the continent to see. Mrs. Crocker's palace has been described so often as to be well known. All along Hill, Fort, Figueroa and Hope streets and Grand avenue, and in fact, most of the streets in the western part of the city, can be seen mile after mile of homes, which, in point of elegance, completeness of appointments, beauty of surroundings and splendor, could not be rivaled by the famous villa settlements of the Riviera. The smaller homes, inexpensive and unpretentious by reason of the wonderful fertility of the soil and the fostering effects of the climate on vegetation, are made marvels of beauty by the luxuriant growth of rare, beautiful flowers and plants. Even the little cabins of the squatters, who, for the time, live on city or unclaimed land, can be found shaded by masses of La Marque or Jack roses, with palms or the nestling palmetto-like banana, and perhaps a veritable tree of heliotrope by the doorstep.

The report of the water companies will give some little idea of the number of homes which have been erected here, all since the boom left, be it well borne in mind. The following is a condensed statement of that fact, as well as the scope and business of the different water companies. It is contained in a pamphlet issued by the Chamber of Commerce in December last, and of course gives no idea of the further development which has taken place in the past six months:

There are four systems of water supply in the city—the irrigating, the main domestic, the West Side highland domestic and the East Side domestic system.

The irrigating system consists of a number of reservoirs, from which water is distributed for irrigating purposes all through the city by means of cement or iron pipes buried under the ground. The price is not excessive, being established so that the receipts will simply defray the expenses of operating the system.

The City Water Works supply domestic water for all the thickly-settled portions of the city below the West Side hills, which is distributed in pipes to consumers. The supply is ample and good. The rates fixed by city ordinance are: For ordinary tenement, \$1.50 per month; two-story house, \$3; three-story house, \$2.50; sprinkling lot, 50 cents to \$1. This company has recently found it necessary to enlarge its reservoirs and otherwise develop its water supply at an outlay of \$350,000; and during the last two years have laid about fifty miles of new distributing mains and put in 2000 new house services.

The Citizens' Water Company supplies domestic water for the hill lands on the northwest side of the city. A large reservoir is filled by a cistern or spring, and the water is forced thence by steam pumps to distributing reservoirs in the hills, several hundred feet higher than the source. The water is pure and healthful. Within the past two years over \$300,000 has been expended in enlarging the system. Four new reservoirs have been constructed, 45 miles of distributing mains laid, and 1353 house services put in.

The East Side Spring Water Company has been recently organized to supply the eastern parts of the city. It draws its supply from living springs on the eastern side of the Los Angeles River. Fifty thousand dollars has already been expended in constructing a reservoir of 350,000 gallons' capacity (into which the water is forced by steam pumps) and in laying over ten miles of mains. One hundred and three services have been put in, and the demand continues for more.

That shows an increase during two years of 4335 houses, but it is to be remembered that almost 25 per cent. of the houses in the residence portion of the city are yet beyond the reach of the water mains and get their supply from wells on their own premises.

Well, the skeptical may inquire this is all very prosperous looking, but if you have no boom down there what

basis have you for such a growth; where do you expect to make any money? What are these people going to live on? In the first place Los Angeles has some manufacturers. Nothing very great, it is true, is the showing that can be made in this line, but still it amounts during the year to considerable. In manufacturing plants there was at the first of this year invested in Los Angeles city something over \$10,000,000. Not enough, to be sure, to entitle the city to be called a manufacturing center, but enough to furnish employment to a large number of men, to keep considerable money in circulation and to unmistakably indicate that the country has much solid resources than paper town and lot stakes.

In this connection it should be remembered that all such enterprises have, until the past year, been greatly handicapped by the high price of fuel. Coal, even in large quantities, has been at nearly a prohibitive price, and only until very recently has the use of crude oil been demonstrated as practicable. The most productive oil fields in Southern California are, it is true, not located in Los Angeles county. Ventura county produces nearly three times the amount that Los Angeles does, but it is all subject to the demands of the Los Angeles market. But to confine the results shown to the Puente fields, which are about 20 miles southeast of Los Angeles, and located in that county, will make a fair showing for future relief to and present amelioration of the conditions adverse to manufacturing enterprises. The development of this district has but just commenced. Four years ago inexperienced men sank the first well, and when they struck a hole which yielded 10 barrels a day, they did not know how to handle it or what to do with it. However, experienced men became interested, and on January 1st there were 10 wells flowing, giving a daily product of 120 barrels, or an average of 12 barrels to the well, or 43,800 barrels during the year. The average cost of oil laid down in Los Angeles is \$11 per ton. The oil is worth \$2 a barrel, and all that is furnished is snapped up at that figure. A ton of coal equals in steam-producing power 140 gallons or three and a half barrels of oil, which costs \$7, giving oil the advantage of \$4 economically. These wells show no falling off in their yield, nor does the district show any evidence of being very circumscribed, for since the first of the year three more wells have been sunk, each of which is at some distance from the other and from the original 10. With the resources of this oil to insure cheap fuel, there is always the possibility of natural gas. That this exists has been demonstrated; in fact, is now daily evidenced at the Puente wells, where all the power needed is generated from the gas which flows from the wells. This oil belt is about eight miles long by one wide. The fact that manufacturing is increasing is fully demonstrated by the great demand for fuel and the increase of the oil supply.

A statement of the city's bank account should allay any fears as to the financial healthfulness of the southern part of the State:

On July 1st the total bank deposits were \$8,550,033 28
The total cash on hand in banks was 5,107,657 88
The total bank loans were 5,777,062 40

The amount of business done by the different banks through the Clearinghouse from April 1st to June 30th was as follows:

Farmers' and Merchants' Bank	\$ 4,297,849 50
First National Bank	4,243,868 67
Los Angeles National Bank	4,022,322 62
California Bank	1,515,233 33
Southern California National Bank	1,177,336 15
University Bank	334,755 69
Childrens Safe Deposit Bank	259,462 85
Total	\$17,298,251 28

The postal business of a city can be fairly supposed to indicate its business activity and progress. The authorities state that during the present year they have handled more matter than at any other time in the history of the city. The following table of the business done during the month of May, 1889, as compared with the same month in the preceding year, is a strong proof of the continued business development of the city.

	May, 1888	May, 1889	In-crease
Carriers employed	26	34	8
Delivery trips daily	4	5	1
Collection trips daily	4	5	1
Registered letters delivered	464	1016	552
Letters delivered	219,977	272,542	52,565
Postal cards delivered	18,941	30,184	11,243
Newspapers, circulars, and all printed matter delivered	143,577	175,297	31,720
Local letters collected	22,891	30,002	16,379
Mail letters collected	203,302	264,608	61,306
Local postal cards collected	16,803	20,311	13,413
Mail postal cards collected	18,605	24,379	15,774
Newspapers, circulars, and all printed matter collected	22,600	23,774	1,178
Sale of stamps	\$8182 92	\$8780 22	\$597 30

There is no postoffice in any city of the size of Los Angeles that does as

much business as is shown by the above figures.

But there is still a stronger argument to be brought up as to the progression of the city, and which is indicative also of the development of the county. The increase of population as figured by any other means than a Federal census is unsatisfactory and delusive. But a comparative count of the babies which first breathed this semi-tropic climate in 1883, as compared with those who arrived in 1889, shows a decided increase, and so with the children of the age of attending school. During the "boom" the little strangers did not arrive nearly in such numbers as at present. In fact, this may be called the "boom" baby year. When the school census was taken a year ago there was a decrease noted in the number of babies under the age of 1 year. In 1887 it was reported that there were but 271 boy babies and 264 girl babies, while from 1887 to 1888 there were but 176 boy babies and 162 girl babies. The school census just completed shows 465 boy babies and 500 girl babies, an increase of 627. More than this, there has been an increase as well in the number of children attending school, and a decrease in those not attending. A comparison for three years is as follows:

	1887	1888	1889
Attending public schools	4372	5912	7101
Attending private schools	134	1194	4526
Attending no schools	649	5550	2156

These figures show an increase of 1799 children in the public schools, and counting 40 children to a room, show that the department of education is in need of 45 more rooms than it had last year.

Bonaparte's famous mot when, in answer to Mme. De Staël's question as to whom he considered the greatest woman, he replied: "She who has borne the most children," is in some measure applicable to Los Angeles. The people are prolific; it is a city of families, and of large families. It is often the case that married people whose union has not resulted in any hostages to fortune find on coming to Southern California to reside that a little semi-tropical stranger makes his or her bow on the world's stage. The real value of this increase of native-born population is somewhat greater than appears to the superficial observer, for it is a fact that a very small percentage of the children, when they arrive at the age of earning their livelihood, go away to other places. They cannot go West, they do not wish to go East, and they find right at their hands ample opportunities for employment.

At this date the County Assessor's figures cannot be had, as the work is not completed, but the totals of the city assessment show a most gratifying increase over the boom-time figures of 1887-88. A comparative showing is as follows:

	1887-88	1888-89
Real estate	\$18,722,000	\$27,321,408
Improvements	6,615,870	6,448,415
Money	523,368	1,209,954
Personal property	3,143,711	4,217,461
Franchises	50,200	3,100
Totals	\$29,108,148	\$39,497,938

An increase of something over ten millions will be noticed.

It seems as if it were needless to cite other facts as proof of the prosperity of the garden spot of the State, but one important feature has not yet been mentioned which is conclusive as an indicator, and that is the railroad business done at Los Angeles. In this department again the balance of trade is greatly in favor of this city. For example:

During the month of May, 1889, through freight shipments from the whole State over the Southern Pacific amounted to 35,078,560 pounds, showing a falling off from the same month in 1888, when the total was 153,154,450 pounds; but from Los Angeles the May shipments this year were 4,243,390 pounds, as against 1,487,800 pounds in the same month in 1888, or a gain of nearly 3,000,000 pounds. These shipments detailed for the month and the totals to June 1st will be of interest to the student of the economic conditions in the Southern Citrus Belt.

ARTICLES.	May, 1889	June 1, 1889	Total to
Asphaltum	70,380		70,380
Barley	828,360		828,360
Beans	578,930		578,930
Brandy	126,700		126,700
Butter	24,950		24,950
Canned goods	2,480		2,480
Empty packages	88,420		88,420
Fruit, dried	2,560		43,643
Fruit, Gr. citrus	2,630,210		9,218,110
Hides	20,800		313,400
Honey	82,860		82,860
Horses	20,000		20,000
Miscellaneous	90,760		237,860
Nuts	21,310		21,310
Potatoes	171,110		171,110
Rais ns	43,440		106,244
Shingles	117,490		24,400
Vegetables	117,490		1,068,080
Wine	82,880		862,330
Wool, grease	914,020		1,626,240
Totals	4,243,390		15,067,810

In the above figures and quotations use has been made of nothing about the accuracy of which there would be doubt. What can be the result of a study of these statements and facts, but a realization that in Los Angeles county, or, rather, in Southern California, the Californian, whether from

Siskiyou or San Diego, can take pride in the reflection that here is one of the richest, fairest, most progressive portions of the great State he loves so well? For what can be said of Los Angeles applies proportionately as well to all of the southern cities and counties. San Diego, San Bernardino, Colton, Pasadena, Ventura, all are striding ahead. The people are full of faith in the country and in their ability to work out its manifest destiny. They are not carried away by gush or bragadocio. When the United States Senate Committee came to Los Angeles a few months ago one of the Senators said: "Yes, your city looks very business-like, but I would like to have seen it during the boom." Secretary Higgins of the Chamber of Commerce at once prepared the following statement of facts in reply:

Since the boom Los Angeles has paved five miles of streets, has made 100 miles of sidewalks, and now has 20 miles of cable road, as well as 10 to be built. Capital and enterprises are continually seeking new channels; new banks are being opened every few months, three new railroads are under actual construction, fruit trees are purchased as fast as they are old enough to be set out, the trade in agricultural implements never was better. Commercial matters are now based on substantial foundations, the elements of gambling are entirely eliminated from real-estate transactions, and business is progressing in a sane, healthy way. The one fact most indicative of the wonderful prosperity, the phenomenal resources of this part of the State, is that all through the weary months of depression after the bottom fell out of the corner-lot craze, not a single failure of any note occurred, not a bank was even hard pushed, and nearly all of the corporations and large land companies which sprang out of the land mania settled their affairs satisfactorily, a majority of them getting down to a basis of sensible business propositions, and a large percentage are now continuing their sale of lands which they purchased to make cities out of to bona fide farmers or homemakers. To the speculator, the boomer, the commercial confidence sharp the county no longer offers opportunities, no longer can be used by such gentry to their profit, but to all others, to the worker by hand or brain, to the man of money or of muscle, to the man who aims to produce, it extends a hearty welcome, it offers unexampled opportunities, and he will find there thousands just like himself.

BEES AND HONEY.

AN INDUSTRY OF MUCH IMPORTANCE AND INTEREST.

Its Ups and Downs—What the Bees Feed on, and Why Southern California is One of the Best Bee Countries in the World.

HONEY BEES find no better place in the United States than Southern California. The seasons are so fashioned in this favored locality that flowers are opening every day in the year, inviting the busy bee to gather honey every hour of sunshine. And when we remember that there is not, taking one year with another, more than 15 days out of the 365 of the year that the sun does not shine clearly, one can readily see that the possibilities of honey production in Southern California are unequalled so far as sunshine is concerned. Every intelligent, observant beekeeper knows that sunshine and heat are the principal factors in producing flowers that are the foundation of successful bee keeping. Cold weather accompanied by fogs or high winds retards the flow of nectar or altogether prevents its secretion in the bloom of trees, plants and shrubs; but cold weather, fogs and high winds occur so seldom in Southern California, that, while it is well to take them into account in calculating the possible amount of honey that may be produced, in a year, yet there are years that neither of these conditions affect the yield of honey at all. The years of 1876, 1878 and 1884 were notable for the almost entire absence of cold weather, fogs or high winds. The rainfall of 1876 amounted to 28.74 inches for the season, and the yield of honey that year was the greatest ever known in California, many apiaries averaging more than six hundred pounds of extracted honey to the hive, and thousands of tons being produced; but the very next season, 1877, the rainfall was but 4.88 inches, and no honey was produced in Southern California, but thousands of stands or hives of bees perished for want of something to feed on. An abundance of rain in 1878 brought the bees that

survived into good shape, and the yield of honey for that year was above the average considerably. It is usual to commence extracting honey about the 1st of May in these favored seasons, and continue extracting sometimes into the month of November following. The bees will produce a little more than one-half as much comb honey as they do extracted honey in a good season.

The bees gather nectar from the bloom of trees, shrubs and plants, indigenous to California, foremost among which is the oak, sycamore, water alder, willow and manzanita. Shrubs such as the sumac, yerba santa, buckhorn, wild plum, wild buckwheat, black or bolled sage, white sage and silver sage, the three latter producing the greater portion of the honey shipped from Southern California, and of a body, flavor and color as dense, exquisite and white as any produced in the round world; the succession of bloom produced by the above list covers the greater part of the year, but trees and plants that have from time to time been introduced into this section, round out the whole year. The citrus family, orange, lemon and lime, afford an unequalled nectar, but it is produced, for the most part, at a time of year when bees are rearing young, and most of it is consumed in the hive. The eucalyptus tree, commonly called bluegum, and extensively grown in Southern California, an importation from Australia, commences blooming in November, and in large groves bloom can be found until July. It is very rich in nectar, and honey made from it has the reputation of containing very valuable medicinal qualities.

The different varieties of acacia are excellent bloomers, commencing in November and continuing until May producing both pollen and nectar. Alfalfa, both wild and cultivated, furnishes good pasturage for bees, but the honey is not so much prized as that gathered earlier in the season from the other sources herein mentioned.

Fruit trees of various kinds, now becoming so common in this locality, such as the apple, pear, prune, peach, apricot, nectarine, quince, olive, loquat and plum, all furnish a good quality of honey, and all the small fruits, such as blackberries, raspberries and the like contribute largely in their season. The fig tree has no bloom for the bee to work on, but when the fruit is ripe if a bird or wasp opens it the bee will soon appropriate the rich pulp that is so sweet and palatable. So one can see that the realm over which the honey bee holds sway in Southern California is as extensive as our broad, rich valleys, the rolling hills and extensive mountain ranges, that produce the sages on their highest peaks.

There are in Los Angeles county, according to the Assessor's return for the year 1889, 13,871 hives of bees, but this assessment is made the first Monday of March, at a time when the very smallest count of the apiary would be made, and only includes large apiaries in a prosperous condition and returning profits to their owners. It would be safe to double this number for the working season, as many of our best bee-masters practice putting two weak colonies together at the close of the season, and then divide them when the increased strength of the colony will warrant it, in April or May. In ordinary seasons the yield of comb honey is about 125 pounds to the hive, and a little over 250 pounds of extracted honey to the hive for the season, though there is a great difference in yields in some localities over others in the same year, and with seemingly identical surroundings and climatic conditions.

The bee-masters of Southern California are an enterprising, industrious, progressive class of men, ready to adopt all modern appliances and machinery used in the apiary; keeping well abreast with their brethren of the Eastern States, and in most years securing much larger yields of honey than the best apiaries can do in the Eastern States.

In Southern California the honey bee was first introduced by O. W. Childs of Los Angeles, in March, 1855. His venture proved a great success, as the bees multiplied very fast and comb honey brought \$1 per pound. His bees were located at his nursery, opposite where his residence now stands, on Main street. He kept them there some years and then sold them to Mr. Thomas A. Geary, who took them to the mountains near where the town of Sierra Madre now stands.

Some few years ago a runaway swarm of bees clustered on the branches of a mulberry tree near Mr. Childs's house, and proceeded to build honeycomb to the branches and succeeded so well that they kept up a thriving colony for three years with no covering or shelter of any kind other than that afforded by the branches and leaves of the mulberry tree, which stood near the carriage driveway. At the end of that time the combs of honey were more than three feet in length and

four or five of them joined together at the top. But the bees growing troublesome to the horses as they were driven by, Mr. Childs desired the writer to take them away. Before doing so, however, all the lower branches of the tree near the honeycombs were cut away and a photograph of them taken, a picture from which adorns the pages of Root's last edition of "A. B. C." of Bee Culture. A copy of which is reproduced in another place.

The picture illustrates how genial and temperate our climate is, when the honey-bee can thrive without shelter of any kind either in rain or sunshine for more than three years.

After the photograph was taken, the writer cut them down and transferred them to a good hive, and they and their progeny now fill many hives. The great bulk of the honey product in Southern California is put up in tin cans holding about 60 pounds each. Two of them are put in a case, and in that shape are shipped to Europe. Comb honey is liable to breakage in transit, and the loss from that cause being serious, but little comb honey is sent to Europe.

The quantity of honey now produced in Southern California is but a tithe of what could be produced if all the available bee pasturage was utilized. All the mountain ranges, both Coast Range, Sierra Madre and Sierra Nevada, produce sages in abundance, besides an almost countless number of other nectar-producing trees, shrubs and plants. The honey, if properly handled, will keep for any length of time, and if foresight was properly used by our merchants, the article could be stored so that a steady demand could be met at reasonable prices, and the trade in California honey made as permanent and lucrative as any other staple article.

C. N. WILSON.

SUCCESSFUL SETTLERS.

MEN WHO HAVE DONE WELL IN SOUTHERN CALIFORNIA.

Interviews with Home-builders Who Started with Little—Ten Acres Enough is the Verdict of Practical Men.

FOR some time past, eastern papers have been in the habit of asserting that Southern California was no place for the poor man—that our lands are too high in price, and that we have nothing but climate to offer settlers.

To refute these statements, THE TIMES has this year secured interviews with a number of men who, coming to this section with little or no means, have made a good living and built up happy homes for themselves and families. The interviews speak for themselves. They will be found interesting reading:

AN ENTERPRISING NURSERYMAN.

George W. Ford in 1873 bought five acres of land a little south of the then town of Santa Ana. It is now inside the city limits. When he started he was quite poor, not even having enough to purchase this small quantity of bare land, which at that time was cheap. To earn money he worked a year for a nurseryman, who failed and could not pay him his wages, amounting to \$250. He took trees for the amount and arranged to buy the land for \$400. He then sold enough of trees for money with which he built a house, planted all his land to trees, and set out nursery stocks between. The second year his apricot trees paid him as much as \$5 to the tree, the fruit being sold to the cannery in Los Angeles. He also made money out of his nursery. In 1881 he purchased two more acres of land adjoining. The price of land had already risen greatly—from \$90 to \$300 per acre. In 1881 he planted this land to 1-year-old walnut trees. These trees paid in 1888 and 1889 as much as \$15 to the tree. In 1883 Mr. Ford leased 23 acres of land, a quarter of a mile north of his place, and put most of it into nursery. In 1884 he bought these 23 acres for \$3000, this money all coming out of what he had earned from his land. Within 30 days he was offered \$3000 for half of the 23 acres. He planted this land also to walnuts, with nursery stock between the trees. These walnuts paid last year about \$5 to the tree. They are known as the "Santa Barbara soft shell," a variety which was introduced in this section by Mr. Ford. He thinks very highly of the walnut as a crop for this part of the country, and has now from 200,000 to 300,000 young trees in his nursery. He sold last year 100,000 trees. He recommends planting 27 to the acre. Mr. Ford says that walnuts will pay 10 per cent. net on \$2000 per acre, within seven years of

planting. After that the yield will continue to increase for 50 years or more. The industry is in a measure a monopoly, as the English walnut will only grow to perfection on a strip of country from Santa Barbara to San Diego, west of the Coast Range, in moist land, or where there is plenty of water for irrigation. In 1886 Mr. Ford was in a position to lease further 200 acres for general farming and nursery purposes, paying a cash rent. He has made it pay well, raising four tons of barley hay to the acre, and then, the same year, 60 bushels of corn to the acre. Such land rents at from \$2 to \$10 an acre. It is irrigated only when there is a dry winter.

In regard to the red scale, which considerably affects trees in this section, Mr. Ford is strongly of the opinion that it is largely caused by lack of care and fertilization. He says that through lack of plant food the trees get sick, and, like sick human beings, they are more liable to disease.

Mr. Ford has prospered greatly, owing to industry, perseverance and good judgment. He is now building a residence which will cost about \$5000. He firmly believes that upon 10 acres of land in Southern California a man can put money in bank from the start—that 10 acres of good Southern California land are better than 160 acres in Illinois.

A TAXPAYER WHO STARTED WITH NOTHING.

T. J. Harlin nearly twenty years ago bought eighty acres of land near town. He had hardly enough money to buy the land. He raised corn, pumpkins and barley, and with his family made a living from the start. After building a house and staying there about five years, he sold out and bought twenty acres nearer in. He has made a specialty of corn and hogs. He also has an apple orchard, which has paid well. His chickens have paid all his grocery bills. Mr. Harlin pays \$300 a year taxes, owning considerable city property.

SMALL VERSUS LARGE TRACTS.

A good example of how a "little land well tilled" is much more advantageous to its owners than a large tract scratched over, is furnished by the fate of the Ross tract, at Santa Ana. This large tract of 2000 acres was purchased by the late Mr. Ross, about twenty years ago, at a price which would not now buy 40 acres of it. He used it mostly for pasturage, raising also a little barley, the idea being that the land was fit for little besides stock-raising. Dying a few years later, the land was divided among his four sons and one daughter. The boys, who are good citizens but not practical farmers, sold off most of the land little by little, chiefly in small tracts. Among those who have purchased these small tracts are D. Edson Smith, George W. Ford and others, to whose success we have referred. Many of these tracts could not now be had for what the late Mr. Ross paid for the 2000 acres.

A PRIZE HOME-BUILDER.

Among the most prominent home-builders of this or any other section of Southern California is D. Edson Smith, a man who happily combines the theoretical and practical of small farming with the power to describe what he has accomplished—a power that is too often lacking among practical men. Mr. Smith is an enthusiastic believer in the possibilities of a small tract of Southern California land, and willingly volunteered to give his experience. He started here seven years ago on ten acres, within the limits of Santa Ana. He had just enough money to buy the land and plant trees, there not being sufficient left for a team, to earn money for which he had to work out. Mr. Smith believes in "intensive" farming. He does not waste a rood of ground. In starting, he set out an acre and a half to grape cuttings and planted peanuts between the rows. In the fall he sold the peanuts for over \$90. This was an extra yield and an extra price. Between the fruit trees, vegetables of all descriptions were planted, and it was not long before the family table was well supplied, and there was corn fodder and beets for horse and cow. An acre of barley was ready to cut by May, and alfalfa by June, and it was cut three times more during the year. The second year it was cut eight times, irrigating after each cutting. Besides the milk, cream and butter used in the family from one cow, there was sold \$75 worth of butter the first year. The sales from peanuts, potatoes, butter, eggs, peas, beans, tomatoes and other vegetables amounted to several hundred dollars, while the cash outlay for subsistence for the same time was only \$68.06, this being largely for meat, flour, sugar and fresh fruit for canning. The only fruit the family had the first year was blackberries. After that, the place yielded berries, peaches, grapes, guavas, oranges and dwarf pears. The

writer on the 12th of December picked ripe blackberries on Mr. Smith's land. Others were ripening, while on the same canes were blossoms. Figs were also plucked from the tree, guavas were ripening, beans and peas ready to gather, and all this within two weeks of Christmas!

To succeed like this, constant watchfulness and care are necessary. The markets must be anticipated as much as possible. Everything that can be turned into manure must be saved, and when a load of produce is taken to market a load of plant food should be brought back. Mr. Smith considers a properly-kept flock of hens a most valuable adjunct to the resources of a small farm, and a constant source of profit. He runs two incubators, and says there is more profit in this than in any other legitimate business. As the settler's trees grow old, the vegetable growing between will be gradually contracted, and small fruit raising increased. At or before the end of ten years, a family may, in this way, expect a net income of \$1000 a year on an average, over and above a good living. In exceptional cases, this figure may be quadrupled, while in others it will fall below. These are conservative figures. In Mr. Smith's own case, he gives the following statistics of receipts:

100 10-year-old and upward walnut trees, 100 pounds per tree, at 6 cents per pound.....	600
60 prune trees, averaging \$2 a tree.....	120
100 pear trees, averaging \$2 a tree.....	200
40 orange trees, averaging \$3 a tree.....	120
100 fig trees, averaging \$3 a tree.....	300
180 apricot trees, averaging \$1 a tree.....	180
1 1/2 acres of grapes.....	150
Total.....	\$1,670

The grapes have since been dug up and replaced by young walnut trees. The above figures leave \$670 for expenses above the \$1000. Then Mr. Smith has left out of the account the family supply of vegetables, the proceeds from the cow and poultry, and all of the fruit from the blackberries, raspberries, guavas, and from several lemon, quince, olive, almond, pear, peach, plum and apple trees. Nothing goes to waste on Mr. Smith's farm. The writer tasted some olives pickled by him. They had first been allowed to ripen, and were vastly superior to the usual article pickled green.

Mr. Smith has a high opinion of peanuts, as a profitable crop in this valley. Santa Ana has exported from \$30,000 to \$40,000 worth the past season. They will yield on an average from 35 to 40 sacks an acre, worth this season from 4 to 4 1/2 cents a pound, which is equivalent to \$50 to \$60 an acre.

Mr. Smith's case is a noteworthy example of what may be done with industry, care and judgment upon a small piece of Southern California land.

The section of Orange county known as Newport, formerly called Gospel Swamp, is about four miles south of Santa Ana, comprising several thousand acres of the choicest land in the State. The soil is a sedimentary loam, which grows especially fine corn and alfalfa. It is also well adapted to apples and pears. Dairying is becoming one of the prominent industries.

MONEY IN PEARS AND APPLES.

Gilbert Lynch is an old settler who has 40 acres, about 20 acres of which are under cultivation. Ten acres are in "devil grass" pasturage, which he considers as profitable as any of his land. He has a young orchard, mostly pears of the Halesworth variety, which look fine. His trees are 4 years old, and yield about 150 trees to the acre, which, at 1 1/2 cents a pound, is equal to \$180. Mr. Lynch says there is money in raising pears and apples, and intends to increase his trees.

A PROFITABLE DAIRY BUSINESS.

A. T. Armstrong settled in this neighborhood about 16 years ago. He began with next to nothing, but by industry, combined with judgment, he has become independent. He owns 60 acres of land, mostly in pasture, well stocked with dairy cattle. He makes the business pay well. During 1889, up to the 1st of September, from 18 cows, six of which were 2-year-old heifers, he sold \$715.80 worth of butter. This would be equivalent to nearly \$1400 a year. He keeps one hired man, who, with himself, attends to his own dairy and farm besides. He claims that the milk which he feeds to his hogs, and the calves he raises, will more than pay his hired help. Mrs. Armstrong runs the poultry business. Her accounts show that she has realized from 150 hens about \$1.75 a year from each hen. Mr. Armstrong has also a fine young orchard, which he claims has paid him well.

IMMENSE PROFIT FROM HOGS.

F. H. Moesser is cultivating the 40-acre ranch of J. H. Moesser, referred to elsewhere. Mr. Moesser has a high opinion of the profits of hog raising, if properly attended to. Less than three years ago he purchased a young sow for \$1, and from her increase has sold over \$500 worth of hogs, and has over \$400 worth on hand, making a total of

nearly \$1000 worth of hogs raised from a \$1 sow in less than three years.

MORE DAIRY SUCCESS.

M. H. Bear, a neighbor of Mr. Armstrong, is another old settler, who is also engaged in the dairy business, and is making a success of it. Last season he sold from 19 cows \$993 worth of butter, besides what was used by the family and two boarders. Besides this, he raised 19 calves.

APPLES AND PEARS.

A. P. Selvidge owns and cultivates 63 acres of land. His orchard of apples and pears is hard to beat. His trees are about 14 years old, and are prolific bearers. Mr. Selvidge says he has gathered as much as 700 pounds of fruit from a single tree, which he sold at an average of 1 1/2 cents per pound, or \$8.75 a tree. As there are about 100 trees to the acre in his orchard, this would give a yield of \$875 per acre annually.

PLUCK AND PERSEVERANCE REWARDED.

J. H. Moesser arrived here in 1873 "dead broke," having just enough to keep him a short time in provisions. The first year he rented about 15 acres of land and obtained some necessities on credit. He had a big family, consisting of a wife and seven children. Next year he bought 40 acres on time, not paying a cent down. He supported his family and paid for this land from what he made out of it the first year, growing corn and some potatoes. He raised all his own vegetables, not buying them, as so many farmers now do, from Chinamen. He also raised chickens, hogs and so forth. Whenever he had a little produce on hand he would take it in a wagon to San Bernardino or some other place to sell it, and bring back shakes to build a house with. In this way he sold large quantities of eggs, chickens, potatoes and other produce. He husked his own corn, the job lasting from November until February. It was hard work to him, as he was inexperienced at it, but he had no money to spare for help in those days. His land is rich, as may be judged from the fact that he has raised 17 crops on the same land, two crops having been raised thereon previously, and the soil will yield another good crop this winter. It has averaged nearly eighty bushels of corn to the acre. Mr. Moesser put out a few trees the first year, enlarging his orchard as his means allowed. He planted mostly pears and apples. These fruits have done best in that section, it being low land. The fruit has been sold on the spot, \$2.50 per 100 pounds having been received for apples. His apple orchard will yield \$150 net per acre. Besides vegetables for his family Mr. Moesser has always made it a point to raise his own hog meat, chickens, butter, fuel, etc. This he considers a great factor in his success. He says: "There is not a place in the United States, where a man can get along so well as here, provided he works and practices economy." Judgment must of course also be exercised. For instance, Mr. Moesser always keeps his corn until he can get a good price for it. He has made enough every year in this manner to pay his taxes. In one case he was offered 37 1/2 cents for his crop. He kept it, and finally sold it for \$1.75. Quite a difference! When everything is rushed on the market at the same time there is of course a glut in that particular line of produce, and the farmer is at the mercy of the middleman. Mr. Moesser has found chickens to pay well. He says that a man who has a small place may just as well keep 8 or 10 hogs as a dog. There is always something going to waste, upon which they can be fed. During the summer, they can feed on alfalfa. Then, in the fall, a little corn may be fed to them, to harden the meat. Mr. Moesser owns considerable property in Santa Ana, which he made out of his farm. He has a good bank account and his property is all in his own name. He says many people scratch over too much ground. Where one man is successful in big farming, 50 go "broke." As soon as one has to hire considerable help, the bulk of the profit goes. Mr. Moesser pays more in taxes today than he was worth altogether 17 years ago. He is a good example of what pluck, perseverance and intelligence can accomplish in a few years, on a small piece of Southern California land.

Among the earliest colonies established in the southern part of Los Angeles county is Westminster, which was founded 18 years ago. The soil is remarkably rich—a deep vegetable humus or peat, which yields astonishing crops.

A LIVING ON TEN ACRES.

G. J. Turner came here with very moderate means. He owns 10 acres, which he has planted to corn, alfalfa, orchard and berries. He is also doing something in the dairy and poultry business. Like many others in this

section, Mr. Turner seems to have solved the question of whether or not a man can make a living on 10 acres.

BUTTER AND BLACKBERRIES.

Henry Stephens has made a success at farming and stock-raising. He owns 80 acres of land, the greater portion of which is in alfalfa. He is dairying, and milks 15 cows. Last season he sold \$52.50 worth of butter from each cow he milked. He has a fine orchard and quite a large piece of land set to blackberries, which he claims will yield four tons per acre per annum.

GREAT ONION YIELD.

John Moss owns 80 acres and cultivates about one-half of it. He excels his neighbors in raising onions, both in size and quantity per acre. He raised 300 sacks last season, that weighed all the way from one pound to five and one-fourth pounds each. The previous season he raised from one-sixth of an acre 87 sacks, or at the rate of 52,200 pounds per acre.

WONDERFUL CROPS.

S. J. Murdoch is an old bachelor and an experienced gardener, from the northern part of the State, who bought 10 acres here a couple of years ago, and has given a most wonderful example of what may be done on that amount of land, with industry and judgment. His case was referred to in last year's Annual. Mr. Murdoch, to exemplify the fertility of the soil, told how he took a corn crop off his land in December and planted the land to onions. He gathered the crop of onions in May and June and got 359 sacks to the acre, which paid him \$450. Then he plowed and planted to onions again (this time, the small kind for pickles) and in 90 days took off the second crop—150 sacks to the acre. On September 25th he sowed the same land in cabbage seed and took off from it 100,000 plants. After the cabbages he sowed to onions again (November 1st) and they were then sprouting, end of that month. Thus two large crops of onions and a crop of cabbage plants had been taken off this ground in 12 months, and a fourth crop started on the way. Mr. Murdoch grows asparagus all the winter. He has raised in time for the early spring market and for shipment east (crops being gathered in February and March) 8000 cabbages to the acre. The largest head weighed 32 pounds and the gross yield was 30 tons to the acre. The cabbages sold at \$17 to \$20 a ton. In beets, a yield of 100 tons to the acre is quite possible. Mr. Murdoch dug one beet that weighed 48 pounds. Among other instances of what may be done upon this soil may be mentioned a yield of 1000 bushels of onions from an acre in a single crop, and 8000 pounds of pumpkins from three vines.

CORN AND POTATOES.

G. W. Rogers's corn crop averaged 100 bushels to the acre; potatoes, 130 sacks. W. C. Jones sells \$75 worth of butter from each cow he milks.

A PRACTICAL J. P.

Josiah McCoy is the Justice of the Peace at Westminster. He came there 16 years ago with very little money and bought 40 acres on the old colony terms, planting it to corn, potatoes and hay. Next he raised some alfalfa, bored wells and went into dairying. He then leased 80 acres more adjoining his lands, which he planted to alfalfa. Mr. McCoy has a large family and has made a good living for them from the beginning. He has also taken up some Government land at Beaumont, San Bernardino county. He makes a specialty of dairying, feeding his cows mainly on alfalfa. He has a fine apple orchard and exhibited 18 varieties of apples at the Los Angeles fair two years ago. He also raises some apricots, peaches and other fruits. He has raised some corn on peat lands which grew 15 feet high. His butter goes mostly to Los Angeles. The Westminster section badly needs a creamery. Mr. McCoy says that all who are willing to work are making a good living around there, while many are building up a good bank account.

STARTED IN A SMALL WAY.

J. V. Sutton came to Orange nine years ago. He landed there without means, but with industry and a sturdy determination to succeed. He had quite a good-sized family to care for, besides himself. Buying 15 acres of land, on time, he commenced to raise corn and hogs, and gradually, as he was able, planted trees, mostly walnuts, of which crop he thinks highly. His trees are now mostly 5 years old. Between the trees he raises corn. This can be done successfully for five or six years, and Mr. Sutton says that in this manner two-thirds of a full crop may be averaged, or say about 50 bushels, his clear land averaging 75 bushels. He raises chickens for family use, and says there is money in the business for those who attend to it. Mr. Sutton has built a neat house on his place. He takes two crops off most of his land—

first about three tons of hay, and then corn. He has no doubt whatever that an industrious man can make a good living for himself and family and something more on 10 acres in this section.

BENEFITED IN HEALTH AND PURSE.

P. Lyon left Northern Illinois for California in 1874. He was doing a good business there, but was a great sufferer from asthma and was forced to leave. When he left Illinois he weighed 140 pounds, now he turns the scales at 200, and is the picture of health. He first went to Vaca Valley, in Solano county, coming to this section the following winter. Since he has been in California he has not had a single recurrence of his asthmatic troubles, although he had a bad attack on his way from the East. He bought 25 acres unimproved, where he now resides, and moved on it two years later, settling out a good many orange trees. He raises many chickens, and says he could not have lived very well without them. They need careful attention, and one should begin in a moderate way, not trying to keep too many at first. Mr. Lyon has also some apricots and prunes, for which he has no trouble in finding a market, either fresh or dried. Altogether, he has about ten acres in fruit. He has cleared as much as \$1500 in a year, in addition to a good living for himself and family.

The vine disease and orange scale have temporarily reduced his income, but Mr. Lyon declares that he would not go back East under any consideration. A short time ago his wife thought she would like to go back East, and stayed there six months, but she now says she would rather live here on bread and water, than there on the fat of the land. Mr. Lyon has made a considerable amount of money out of his small farm, and has invested it in property. He is a subscriber to the Mirror and keeps himself well-informed upon matters relating to his business.

SUCCESS IN POULTRY.

Exponents of success in the poultry business are Messrs. King and Shanks, who leased 10 acres about the first of the year for that purpose. They commenced operations in February, and are making a signal success. They do their own hatching by incubation, securing about 75 per cent. from eggs used. They have something over 600 full-grown ducks on hand and 500 chickens. They have had no disease among their poultry. There is a remarkable agreement among those who have given the industry a fair trial, as to the profitable character of the poultry business. The market for eggs and chickens is never glutted. Eggs are as good as cash at the grocery. The trouble is that most people who go into the business are too careless and will not take enough pains to keep their fowls clean and healthy. Another settler in this district, F. A. Gates, who has 1100 fruit trees on his 20-acre ranch, also makes a specialty of poultry. He has 500 laying hens. In 1883 he sold \$625 worth of chickens and eggs from 250 laying hens. He calculates that his profits for the past season will foot up \$1000 from his poultry. A COMPETENCY FROM CORN AND HOGS.

W. B. Pendleton came to the Los Nietos Valley in 1870 without a dollar. He went to work for wages, and at the end of the first year was able to buy a team. The second year he rented some land and made a crop of corn, which he sold, and applied the proceeds as a first payment on 40 acres of land that he had contracted for. This he planted to corn, managed to buy some hogs, which he fed his corn crop to, and the next spring he sold his hogs for a sufficient sum to pay for his 40 acres. He kept up the business of raising hogs and corn, from which he made a good profit. Today he owns 270 acres of choice land, a large quantity of valuable stock and a handsome bank account, all of which were made by tilling the soil and raising stock. Mr. Pendleton's address is Norwalk.

\$45,000 IN ELEVEN YEARS.

T. D. Cheney started in 1876, near Downey, in debt for his 40 acres of land. By work and good management he accumulated, by 1887, a property which he sold for \$42,000, reserving seven thoroughbred cows valued at about \$3000. In other words, Mr. Cheney, in 11 years, made \$45,000. He commenced without money and in debt, and accomplished this by work, not speculation. His money was made from alfalfa and stock. Mr. W. W. Orr, his next-door neighbor, is a parallel case.

ANOTHER MODERATE FORTUNE IN FIFTEEN YEARS.

T. L. Gooch bought 20 acres in 1874 on a credit, borrowing from a friend the first payment. He is today one of the substantial men of the Los Nietos Valley, worth anywhere from \$30,000 to \$40,000. He made his money raising corn in the first place, and, as he ac-

cumulated means, bought other land and planted fruit trees and vines. Today he has a large income, and does not necessarily work.

CAME HERE "DEAD BROKE."

Henry White owns 40 acres of choice land in the Ranchito neighborhood, near Rivera. His place is highly improved, and is principally set to English walnuts and fruit trees, bringing its owner in a handsome yearly income. Mr. White came to the valley in 1876, dead broke, went to work for wages, and, at the end of two years, accumulated sufficient money to make a small payment on 40 acres, which he planted to corn, working for wages at such times as his crop did not require his attention. At the expiration of two years he paid for his place, and has improved it, bringing it to its present high state of cultivation and profitable condition.

WHAT HE DID WITH \$500.

James Tweedy came to Downey in 1882, with about \$500. He bought 65 acres on time for \$3500, and planted it all to corn. Next year he planted corn again, and with the proceeds of the two crops paid for his place and had \$1000 left. In addition to this, he had supported his family. With the \$1000 he built a good house, and then planted 20 acres to English walnuts, which bring him in a large annual income.

O. P. Parsons, one of the oldest settlers in Downey, planted 14 acres to walnuts about 1870. In 1883 he exhibited shipping receipts and papers which showed that these walnuts had netted him \$300 an acre. The remark was made to him that he would probably not sell this land for less than \$3000 an acre, whereupon he replied that he would not sell at that price, as his income therefrom was increasing steadily every year, and he would know of no better investment for his money.

HE ARRIVED WITH A PAIR OF BLANKETS.

J. E. Luther came to Tustin about 10 years ago, his possessions being confined to a pair of blankets, a shotgun, a pair of strong arms and a stout heart. He went to work for a farmer at \$1.50 a day. In a short time he was able to purchase a small piece of land on time, setting it out gradually to oranges, apricots and grapes. He now owns a well-improved place, with a comfortable house on it. Two years ago he made \$500 from a little over half an acre of apricots, which he dried in the sun, without assistance.

AN ENTERPRISING MAN.

J. T. Moorhead came to Tustin about 12 years ago with very little money. He has since had several places, improving and selling them at good prices. He has planted many trees. He has 10 acres which were in grapes. These he has dug up, on account of the vine disease, and is now planting the land to oranges and walnuts. He also has a home place of about two acres, with a nice house on it. Mr. Moorhead is well fixed now, being out of debt and owning both these places, with a little over and above.

Along the western limits of Santa Ana, bordering the Santa Ana River, is a strip of country formerly considered worthless, but now very fertile and easily cultivated, needing little irrigation, and for many crops none at all.

BIG PROFITS FROM DECIDUOUS FRUITS.

A. Chase owns and cultivates 22 acres in this section. His orchard covers seven acres; 200 apple trees and 500 pear trees. About 50 pear trees are now bearing. There is not a single weed in his orchard. Two and a half years ago two and one-eighth acres of Mr. Chase's apple orchard netted him \$400; the apples being sold at the very low figure of three-quarters of a cent per pound. His corn crop averages about 80 bushels an acre, and his alfalfa eight tons an acre. He thinks there is more money in deciduous fruits than in any crop he can raise, and will increase his number of apple and pear trees.

CORN AND ALFALFA.

George M. Stanton owns 16 acres, seven acres of which is in corn, seven in alfalfa and two acres of orchard. He claims that his alfalfa will yield nine tons per acre, and his corn 75 bushels per acre. He thinks that corn and alfalfa are the best paying crops he can raise on his ranch. His orchard looks well and the trees are good bearers.

INTENSIVE FARMING.

J. M. Copeland's 11-acre ranch, near Santa Ana, is one of the finest in the valley. It is all planted to walnut trees that have just commenced bearing. The walnut tree is rapidly taking the place of the vineyard in this section, and in some instances it has displaced the orange grove. Deciduous fruit trees are set between the walnuts, and squashes are growing between these trees. He sold last season \$260 worth of squashes from this land,

thus proving that a walnut grove can be grown until it becomes profitable, and the ground used for general farming purposes at the same time.

BIG YIELD OF APRICOTS.

E. Marsh, near Villa Park, owns 10 acres of choice land, on which he is making a good living for himself and family, consisting of seven in all. He has a splendid orchard, all in deciduous fruits. He sold in one season \$160 worth of fruit from 90 apricot trees.

RESTORING A SCALE-INFESTED ORCHARD.

W. B. Lamson's place, near Santiago Creek, shows what can be done with orchards that have been neglected by careless owners. Two years ago he bought 17 acres of first-class land, and five acres a mile further north. About five acres of the land had been set out in orange trees, but they were in a terrible condition. They had been badly neglected, and the scalebugs had got such a hold on them that they were almost completely bare of foliage, many of the branches being entirely dead. To attempt to restore these trees to a healthy condition appeared a most difficult task. It was some time before Mr. Lamson could make up his mind whether to dig up or make an attempt to save them, but he finally decided on the latter course. He first trimmed off the dead branches, after which he gave the trees a good spraying, then a thorough cultivation and a plentiful supply of fertilizers. He commenced this course about a year ago, and has continued it as required up to the present time, and a more wonderful transformation can hardly be imagined. The trees are now covered with a new, healthy growth, and are fairly well loaded with clean fruit of a good size. His Washington Navels will compare favorably with any in the country. It is the opinion of those whose views are entitled to respect that a prudent, careful man need have little fear of the red or black scale on his citrus trees. It pays to cultivate and fertilize. Mr. Lamson also does well by raising vegetables for the eastern market. He has eight acres planted to green peas.

On a neighboring place \$100 worth of blackberries were sold the last season from four rows of briars 90 feet long. Another neighbor asserts that \$200 clear money can be made every year from 100 hens, if properly managed.

SHIPPING WINTER VEGETABLES.

J. P. Williams, in the thermal belt, along the foothill range, has 12 acres in tomatoes and eight in peas, which he ships east during the winter. The land was formerly in vines. Half a dozen persons were engaged in gathering the tomatoes with which the vines were thickly covered on the 18th of December. Mr. Williams was not at home when the writer called. There is a big opening for the vegetable shipping industry in this section, and a number of other settlers have already commenced in it.

ANOTHER MAN WHO STARTED "BROKE."

R. M. Hargrave came to Santa Ana 15 years ago "dead broke." He bought 30 acres, two miles north of town, on time, and worked out to make a little money. He planted his land to corn, and after the second year began to plant fruit trees, mostly orange. He has married since settling there. He now owns a well-improved place. His vines, like others in the neighborhood, have been lost through the vine disease. They paid well while they lasted. He has found chickens profitable. He has made a good living from the start, and has put by a little money each year. Four years ago he first planted peanuts. This year he raised 200 sacks, worth \$2 a sack, on eight acres. He has planted some walnuts, which he prefers setting out from the seed, transplanting them just after they have sprouted. He thinks they bear earlier this way. In 1883 he made over \$200 from one and a quarter acres in watermelons. Mr. Hargrave says he never saw a more happy and contented people than lived around Santa Ana five or six years ago, before they became infected with the speculative craze. This, however, is rapidly dying out, and old conditions will soon be restored. In 1888 Mr. Hargrave raised 20 tons of sweet potatoes on two acres. Many of them weighed 15 pounds and the largest 20 pounds. He sold them at an average price of \$1.25 per 100 pounds.

A Corn-growing Country.

One-half of the corn raised in the State of California is grown in Los Angeles county. The corn produced in this county is the finest that can possibly be grown, grading at the highest standard fixed by any of the great grain markets of this country, and the yield per acre is enormous, averaging frequently 100 bushels to the acre, while in many places the stalks grow 16 feet high.

SECRETS OF SUCCESS.

HOW TO EXTRACT WEALTH FROM THE SOIL.

Valuable Hints from Practical Home-Builders—Over-Irrigation—Too Much Land—Fertilization Versus Disease.

IN traveling through Los Angeles county in search of information for the ANNUAL TRADE NUMBER a TIMES representative gathered many interesting facts and hints from practical horticulturists in relation to their business and to home-building in general. A few of these points have been embodied in the following paragraphs. They will doubtless be found interesting and valuable to those who think of venturing upon "a little ground well tilled" in this section:

GIVE WALNUT TREES ROOM.

Walnut trees should have plenty of room in the orchard. Many do not bear a full crop because they are crowded too close together. Besides this the trees bear, under such circumstances, a smaller and inferior nut. The trees should not be less than 50 feet apart. A grower who took up half his trees found that he got a greater quantity and better and more marketable nuts off the same area of ground than he did when it contained double the number of trees.

DON'T OVER IRRIGATE.

Irrigation is too much practiced. It is overdone. Many fruits can be grown of better quality without irrigation. The ground should be plowed deep and kept plowed deep each year. It should be cultivated thoroughly to keep the weeds down and from growing, ceasing after the season for weeds has passed until the next year. In various localities in Los Angeles county are soils with surface water from 19 to 50 feet deep. On such soils deciduous fruits and grape vines do very well and produce fine crops of fruit of the best quality. The orchardist who produces fruit without irrigation will have the best fruit at the least cost.

IDIOSYNCRASIES OF THE ORANGE.

The orange tree is one of the hardiest fruit trees that grow. It will survive more abuse than any other; but to realize the greatest amount of good, it requires special attention and studious care. In our climate, and under our system of culture and irrigation, it insists on being dormant three or four times a year and these times are irregular in every grove. Two trees, standing near each other, seldom agree exactly as to their times and period of growth. The cause of this is unseen, but the result needs attention. All who have had much experience in spraying trees for pests have observed that the same wash, put on at the same time, on a row of trees, does not have the same effect upon each, and this is owing, no doubt, to the different conditions of each with respect to growth.

DON'T FARM TOO MUCH LAND.

One of the chief points insisted upon by successful home-builders throughout the country is that the settler should not fall into the error of attempting to cultivate too much land. The old Californian idea of farming is derived from the time when ranchos were measured by the square league, and a man could not tell within a thousand or two, how many cattle or horses he possessed. Then came the days of big wheat farms—vast extents of land scratched over by gang plows, and from which one good crop in three years was considered a fair average. To such farmers, who "put in" so many hundred or thousand acres in grain, much as they would speculate a like amount in mining stocks, the idea of attempting to farm on anything less than a quarter section of land appeared preposterous. They did not seek to build homes, but to "make a raise." It was only with the advent of fruit-growing as a regular business that the era of small homes began and the true capabilities of the soil of Southern California began to be understood. Many practical cultivators express the opinion that a man can do better on 10 acres of land in this section than upon 100 acres. Ten acres is about all that one man with his family can attend to, if worked to its full capacity, and as soon as the settler has to begin to have help, the profits decrease very rapidly, so that the difference between the net profits of 10 and 20 acres is not nearly so great as might be supposed. There is plenty of work on 10 acres, properly cultivated, in addition to the care of chickens, cows, bees, and so forth, to

keep a large family busy the year round. Fruit trees can be planted on the land, between them small fruits, and then again vegetables, until the trees become too large. Under such circumstances there is further a constant succession of crops, from the 1st of January until the 31st of December, so that the settler need not spend an idle day, unless he pleases. All who have tried it in the right way and have persevered agree that a man can make a good living for himself and family and lay by some money in bank upon 10 acres of land.

FERTILIZATION VERSUS DISEASE.

"I believe," said a practical horticulturist, "that three-fourths of the cases of insect pest depredations among our orchards and vineyards are due to lack of proper fertilization. Because our soil is wonderfully rich, the farmers appear to think that it can go on growing crops forever, without fertilization. This is as absurd as to suppose that a man could keep taking money from a pocket into which he puts nothing back, and yet always have the same amount on hand. The consequence is that the trees, like human beings, being ill nourished, become an easy prey to disease. Feeding the trees and vines with what is necessary for plant life will, in my estimation, greatly lessen the danger from disease."

RAISE A VARIETY OF CROPS.

It is a good plan not to put all your eggs in one basket. Raise a variety of crops; then, if one fails, you will have others to fall back upon; or, should the market be depressed for one variety of produce, prices may be good for another; yet another reason for a variety of crops is that, in this manner, work is provided for almost the year round, instead of having it all crowded into a few weeks or months.

GROW WHAT YOU EAT.

One of the first lessons for the small farmer in Southern California to learn is to raise, as nearly as possible, all he consumes in his family. By keeping chickens, a cow and bees, and growing vegetables and small fruits, this may easily be managed; sales of extra eggs and chickens being sufficient to buy what few groceries are needed. This makes quite a marked difference in the year's expenditure. The custom among California farmers of buying their milk, butter and vegetables is most extravagant and senseless, in a land where alfalfa and vegetables grow almost spontaneously.

WATCH YOUR MARKET.

Watch your market. Do not place yourself in a position where you have to dump your produce on the market as soon as the crop is gathered. If you do, you may be sure you will come into close competition with many of your neighbors who act in the same shiftless manner, and the result will be low prices; whereas, by carefully watching the market, and selling when it is high, you may secure the top price. In another column of this issue is an interview, in which a farmer tells how he has always made his taxes by holding his corn until prices were high.

WASTE.

It is not alone in failing to grow crops which might easily be raised that California farmers are thrifless, but in wasting much of what they do grow. How many thousand tons of fruit and other produce go to waste every year in Southern California! This is all wrong. If fruit can not be marketed fresh, it can be preserved by drying, canning, or otherwise. Such work can frequently be done during odd hours, when there is nothing else to be done. Among the fruits which largely go to waste in this section are the smaller varieties of oranges, which are not readily marketable in their fresh state, but may be readily converted into marmalade, which is now largely imported from Europe. Such utilization of produce which is now wasted would go a long way to change unprofitable into paying farms.

PROFITS OF POULTRY.

There is no one subject upon which a TIMES representative found the small farmers of Southern California so unanimous as upon the profits of poultry raising, when it is given proper attention. Many settlers stated that they could not have made expenses from the start, had it not been for their poultry. Eggs always fetch a high price in this country, and are as good as gold in exchange for groceries. The main points insisted upon in keeping poultry are cleanliness, fresh water and green food. They also need shelter at night, as the Southern California nights are very cold, in contrast to the days.

THE ALMOND.

Almond culture has not hitherto proved a brilliant success in Southern California. The varieties formerly planted have been found in most cases undesirable, and have yielded little or no profit to the owners. As a consequence, many trees have been dug up

or grafted to other fruits. Recently, however, some California seedling varieties have been introduced, which have done very well, and the result will doubtless be the planting of a considerable acreage to this fruit, which is very profitable. It is a rather delicate tree in its choice of a location, preferring sheltered corners and a light, friable soil.

ALAMEDA COUNTY.

A Comparison—Los Angeles Still Holds the Second Place. (Oakland Enquirer.)

A tabulated statement of the wealth and taxation of the 53 counties of the State has been issued by Controller John P. Dunn, which shows that in both respects Alameda is highly favored. The total assessed value of property, including railroads, in this county is \$71,896,182, which is larger in amount than the wealth of any other county except San Francisco and Los Angeles. Although a portion of Los Angeles was set off to create the county of Orange, Los Angeles maintains her place as the second wealthiest county in the State, with \$84,376,319 of property. San Francisco is assessed for \$291,700,433. After Alameda, Santa Clara and San Joaquin are the wealthiest counties, the former having \$53,000,000 and the latter \$38,000,000 of taxable wealth. Then comes Sacramento and Fresno with \$34,000,000, and San Diego and Sonoma each with \$31,000,000. The counties with valuations between 20,000,000 and 30,000,000 are in the order named: Colusa, Tulare, San Bernardino, Yolo and Solano. The little county of Alpine has but much over a quarter of a million of property, and Mono has less than \$1,000,000. The new county of Orange falls short of \$10,000,000.

Generally the larger counties have the lower tax rates—something which advocates of county divisions ought to remember. San Francisco, with a tax rate of \$1.722, is an exception to the rule, and the rate in Los Angeles is higher than in Alameda. Our State and county rate is \$1.15 inside of incorporated cities and \$1.45 outside of such cities, where road taxes are levied. In Los Angeles the rates are \$1.50 and \$1.80 respectively, while in Santa Clara they are the same as in Alameda. Santa Barbara also enjoys the same low rate, while San Mateo and Colusa have the lowest rates of all, the former 1.08 and the latter 1.10 outside of incorporations. The smallest county (in wealth) has the highest rate, the people of Alpine having \$3 on each \$100 of valuation. Mariposa, Del Norte, Inyo, El Dorado, Shasta, Sierra, Trinity and Yuba are the other counties which have exceptionally high rates. The total valuation of property in the State is \$1,111,500,979, of which a little over \$40,000,000 consists of railroads.

SUGAR BEETS.

Further Analysis of the Chino Ranch Products. (Chino Champion.)

The latest analyses of sugar beets by Mr. Gird gives some unexpected and encouraging results. It was feared that after the beets matured the sugar would gradually turn to glucose. Analysis several weeks ago proved that this process was slow and but slight 70 days after maturity, whereas tests this week indicate a fair probability that the glucose is diminishing and the sugar increasing. A few weeks ago 4-10 of 1 per cent. of glucose was found, and at no time a higher percentage. This, of course, was trifling, but indicated the tendency feared. On Tuesday of this week [December 17th] beets grown by Messrs. Crawford & O'Donnell, on the western part of the Chino ranch, were taken out of the ground and accurately tested. The seed was planted April 1st, and the beets undoubtedly matured in less than five months—perhaps in four—the exact time was not noted. But allow the time to have been five months, and then the beets just tested remained in the ground 100 days after maturity. The analyses give these results: Total solids, 16; cane sugar, 13.2; purity, 82.5; glucose, 8-100 of 1 per cent.

Although there is a large loss in sugar, yet it is less than 1 per cent. below the standard, with purity 2.5 per cent. above standard, and the glucose less than contained in beets from the same planting tested several weeks ago. There are facts which may explain these unexpected changes, but the scientific may apply them. A very gratifying fact seems to be proven: that sugar beets may remain in the ground here 100 or more days without deterioration to injure them for successful manufacture, and this fact considered with the other one, that seed may be planted over a period of four or more months, assures a very long season for both grower and manufacturer—two points of great value.

THE ROBBER VASQUEZ.

SUPERINTENDENT MILES'S INTERVIEW WITH THE BANDIT.

A Dramatic Incident on the Site of Pasadena—A Close Shave for ex-Governor Stanford and Party—Interesting Reminiscences.

FIFTEEN years ago a scene was enacted on the site of the present city of Pasadena, in one of the closing acts of a tragedy in real life, the leading actor in which ended his romantic career a few months afterward on a scaffold in the jail yard at San José. The incident—a commonplace highway robbery merely—derives its historical interest chiefly from the circumstance that the line of retreat chosen by the robber on that occasion proved an accidental trap. It destroyed his shrewdly-laid plans, and contributed directly to his speedy capture, thus bringing to a close a career of high-handed robbery which had extended over a period of twenty-five years, embracing a series of operations then unparalleled in the history of the Pacific Coast.

At this time the broad tract, sheltered by bold spurs of the San Gabriel range on the north and east, and extending to the gulch of the Arroyo Seco on the west, and gradually descending and widening out into the San Gabriel Valley at the south, was only a wild common, where civilization had just begun its initial work. In the neighborhood where the handsome Public Library building now stands, a few streets had been laid out, crossing each other at right angles, and on a few of the lots plain little cottages had been erected, some of them tenanted. At another point the water company of Los Angeles had built a large reservoir. That was about all there was to be seen at that time of the charming city of Pasadena. Its fine public buildings, elegant private residences, broad boulevards and charming orange groves were then all in the uncertain future.

On the 14th of April, 1874, Charles E. Miles, superintendent of the Los Angeles Water Works, accompanied by a friend named Osborne, after a visit of inspection to the reservoir, was returning to Los Angeles in a two-horse Democrat wagon. They had arrived at a point where the road curved downward through a little cluster of liveoaks, when a party of five mounted Mexicans came into view. They were riding at an easy lope along a trail leading north, and were each armed with a six-shooter carried in a holster at the side, and a Winchester rifle swung from the horn of the saddle. Their appearance created no alarm, as mounted men habitually carried arms at that time and were met with everywhere. As the leading horseman met the wagon, however, he suddenly raised his rifle, and, pointing its muzzle at Miles's breast, sternly exclaimed: "Hand me your watch and your money, quick!"

Miles laughed, goodnaturedly, at what he thought was intended as a rough joke, saying:

"That's pretty well done! Pretty well done! I hope your gun ain't loaded, though?"

"Yes, it's loaded," was the quick response, "and I'm in earnest! I am Vasquez, and yonder comes the Sheriff after me and my party now—don't you see them?"

Sure enough, an armed party was seen coming up from the direction of San Gabriel, urging their horses to the top of their speed.

"Pronto! Pronto! (quick! quick!) there's no time to lose!" urged the robber; and, comprehending the critical nature of the situation, Miles handed over his \$480-gold watch and chain and what few dollars he happened to have in his pockets. Mr. Osborne, also obeying the law of necessity, gave up his silver watch and his pocket money, and, with a saucy "adios!" the audacious highwayman and his fellow cut-throats put spurs to their mustangs and dashed away to the north, in the direction of Moore's Trail.

From almost any point in Pasadena now a section of that trail can be seen—looking like a fine line drawn across the face of the mountain at the north, appearing over the crest of an intervening foothill, from some point behind it, and rising by an even but rather steep grade, and finally disappearing in the mouth of Arroyo Seco Cañon. This trail had been built some years before, at great expense and labor, by a Capt. Moore, who intended to establish a short cut over to the Big Tejuanga, and from thence to the Soledad. After completing it for a dis-

tance of about nine miles, and across the summit of the divide, to a point within two miles of the Tejuca, the work was abruptly ended, its further progress being found absolutely impracticable. There was a dense growth of manzanita, the branches of which were so intricately intertwined as to form a network so close and strong that a wildcat would be puzzled to find its way through it.

The "flat" sloping toward the deep cañon was everywhere seamed with deep, precipitous gulches, choked with fallen timber and huge granite boulders, altogether presenting an accumulation of obstacles that were deemed practically insurmountable.

It is a matter for profound wonder, however, that neither of the old settlers living anywhere near or within sight of the southern end of this trail were aware of the abandonment of so conspicuous a piece of work. It seems to have been taken for granted that the trail was finished all right; for in reply to his preliminary inquiries, while forming his plan for escaping to the Soledad region, he was assured by old settlers living close to the foot of the mountain, where the trail begins, that it led over to the Tejuca. He knew that such a route could not be flanked at any point, and would lessen the distance to less than one-half that by the roundabout stage road across the San Fernando Valley and San Francisco Cañon.

A few reminiscences at this point will enable the reader to perfectly understand the situation. During the early part of his lawless career Vasquez had twice made his escape from San Quentin Prison, but for the last 10 or 12 years previous to the time of which we are writing, he had been so cunning in laying his plans, and so adroit in their execution, as to have baffled the most determined efforts of the authorities to effect his capture. He grew bolder and bolder in his operations every year, until his very name became a terror, and it was finally realized that he was really depreciating the value of property in the State, and deterring capitalists from investing here. Finally, during the fall of 1873, he perpetrated an outrage that aroused such a feeling of intense indignation throughout Southern California, and determined the authorities to put an end to his depredations at any cost.

With a party of four followers he made a descent one night on the store of Andrew Snyder at Pal-cinos, a little hamlet in that part of Monterey county which has since been created into San Benito county. The place was a lonely one, in a bend of the river near the mouth of Tres Pinos Creek, 12 miles south of Hollister. The affair has passed into history as the "Tres Pinos robbery." Adjoining the store was a hotel kept by Beander Davidson, and in rear of these buildings were a corral and stables. The robbery was planned by Vasquez at the house of one of the conspirators, Abdon Leiva, near New Idria. This man, a Chilio, had sold his house and crops, put his wife Rosario and the children on a wagon loaded with the household effects, and started her on a journey south to Los Angeles county. Manuel Larios, husband of one of Vasquez's sisters, accompanied the woman as a guide and to manage the cattle and horses which were driven along. It was agreed that after robbing Snyder's store the gang should hasten south and overtake and relieve Larios, and convey the wagon and herd to the "lower country."

In pursuance of this plan Vasquez left New Idria, and by way of trails known only to vaqueros and outlaws traversed the mountain range between the Panoche valleys and that of the San Benito, and hid his men in a little gulch above the road and about two miles south of the store early in the morning, and during the afternoon sent Leiva and Moreno to the place to make note of the "lay" of things there. They drank several times at the store, and took several bottles of whisky to their comrades. The party consisted of Vasquez, Chavez, Teodoro, Moreno, Leiva and Gonzalez.

Soon after dark the party burst roughly into the store, with drawn weapons, and ordered everybody to lie down. The clerk and two or three customers who happened to be in promptly obeyed and were quickly bound hand and foot. After robbing the safe and money-drawers the party began selecting articles from the stock of ready-made clothing. George Redford, a freighter, driving into the corral while this was in progress, was ordered to hold up his hands. He refused, with an oath, which was the last he ever uttered, for he was instantly shot dead. Mr. Davidson, the landlord, was in his backyard at the moment, and instinctively divining that robbers were taking possession, sprang into the house and ran through to close the front door. Just as he was in the act of closing it a shot was fired from the direction of a high well-curb, that stood out in the street; the ball passed through one of the panels of the door and struck the

unfortunate man in the breast. He fell back in the arms of his wife, and died almost instantly. Bernal Berhuri, an Italian shepherd, entered the store to buy some tobacco, and seeing the men lying on the floor, tied hand and foot, became alarmed and ran out. He was shot dead while climbing a fence close by.

Selecting nine valuable horses from the stables and a lot of ready-made clothing from the large stock in the store, the robbers fled southward, overtook Mrs. Leiva on the second day, and relieved Larios, who returned to his ranch near New Idria, while they made all possible speed to the wild country near the boundary line of San Bernardino and Los Angeles counties, where they thought to pasture their stolen stock in safety and elude pursuit.

Meanwhile the telegraph had flashed the news of the murderous outrage far and wide, and the press of the State appealed to the Governor, urging him to increase the reward and institute plans that would wipe the formidable band of outlaws from existence. Capt. J. H. Adams, sheriff of Santa Clara county, happened to arrive at Hollister when the news was brought there, and he at once instituted a pursuit so vigorous and so determined that he reached the Elizabeth Lake region close on the heels of the fleeing robbers. On his way he had swung across the valley to Bakersfield, and while there he sent a telegram to Sheriff W. R. Rowland of Los Angeles. This alert officer instantly organized a posse, composed of picked men of proved courage, skill, energy and endurance, and cooperated so promptly and efficiently with Adams that the robbers were flanked and headed off at Little Rock Creek Cañon, and effectually baffled and thwarted in all their efforts to break through into Mexico. Abdon Leiva, under the pretense that Vasquez had seduced his wife Rosario, and that he was so anxious for revenge that he was willing to jeopardize his own life and liberty, voluntarily surrendered to Rowland and gave information that materially aided the officers in locating the hiding-place of the gang. They barely missed capturing the wily chief one night by unfortunately taking a wrong road.

On this expedition Rowland's posse, led by him in person, was made up as follows: Under Sheriff Albert Johnson, Maj. H. M. Mitchell, Pete Gabriel (who has since achieved an enviable reputation for courage and efficiency as Sheriff of Pinal county, Ariz.); "Babe" Crowell, "Bud" Bryant, Sam Vincent, Constable Sam Bryant, Detective Emil Harris. A few shots were exchanged with Vasquez and Chavez at Little Rock Creek, but when a charge was made upon their position the robbers retreated and escaped to brush on the mountain side. The stolen stock was all recovered.

During the winter months following Gov. Booth was urged by leading citizens to take some decisive steps to put a stop to this outlaw's career, and he determined to do so, if it cost every dollar in the secret-service fund at disposal for such purpose. He finally decided to put a party of eight men in the field, under the leadership of Sheriff H. N. Morse of Alameda county, an officer who had earned a world-wide reputation for efficiency in the pursuit and capture of criminals. Morse was authorized to select his own men, and to start an expedition when the rains had ceased and roads and trails were passable, and grass sufficiently abundant to maintain stock. The party was made up as follows:

Sheriff Harry N. Morse of Alameda, Sheriff Tom Cunningham of San Joaquin, who had won a reputation almost equal to that of Morse as an officer; ex-Sheriff Ambrose Calderwood, who had also won a reputation by efficient work; Deputy Sheriff Harry Thomas, a noted trail follower; George D. Morse, a son of the Sheriff; Ramer Romero, an accomplished vaquero thoroughly conversant with the mountain ranges, guide; Ralph Faville, Deputy Sheriff, an officer of tried courage; David Davids, cook and general utility man; A. B. Henderson, correspondent of the San Francisco Chronicle. "Boyd" Henderson had won a high reputation for courage and efficiency years before, in the employ of the New York Herald, in pursuit of the famous Lowry outlaws in the swamps of South Carolina—having, alone and in disguise, penetrated to their headquarters, a feat requiring courage and self-confidence of a high order. Mr. Henderson now holds the responsible position of managing editor of the San Francisco Examiner.

I have space for only an inteline of their movements. Leaving the Southern Pacific Railroad at Berenda Station, in the San Joaquin Valley, with a four-horse team and wagon, carrying a complete camping outfit and stock of provisions, the party started about the last of March. The plan was to visit every hiding place and rendezvous in the Coast range and inner Coast range, moving gradually south to the borders of the desert, hop-

ing either to capture Vasquez and his gang or drive them from the country. Of course there was no expectation that the wily robber would allow the party to catch him asleep—and there were features of Morse's plans "too numerous" to mention. It can be readily understood that while the party was searching any particular section, its leader had men at the same moment in other and distant parts of the State cooperating with him and in constant communication.

At the time at which this sketch opens the Morse party had arrived south of Fort Tejon. The members were separately inspecting trails, and several men of reliability, familiar with the intricate trails of the region between the San Joaquin Valley and Los Angeles, were also at work. The situation soon became such that every practical avenue of egress from the Los Angeles region to the great San Joaquin Valley was under the watchful scrutiny of the Morse party.

Of this formidable obstacle in his way Vasquez was unaware when he laid the plans for his "spring campaign." He knew that extraordinary efforts would be made when spring opened to effect his capture; he was penniless, and it was necessary for him to make a small stake to begin with. Through a young Mexican sent out for the purpose, Lebrado Corona, he learned that an Italian rancher named Alexander Reppetto, living a few miles southeast of the city, had just sold some wool, and he resolved to obtain the money paid for it. Taking Chavez and three others, he arrived near the ranch on the night of the 13th of April, and on the following morning applied to Reppetto for "work." The Italian was a crabbed, crusty old bachelor, who lived with a single companion, a young nephew, and he surlily answered, that he had no work, adding, in an insulting way:

"I don't think you look as though you want work. Your hands don't look as though you ever had worked!"

"Who do you think I am, then?" said Vasquez.

"O, I don't know," he replied with a shrug, "you may be the robber Vasquez, for all I know!"

"You are just right, old man," the bandit replied; "that is my name, and now I want the money you got the other day for your wool!"

Reppetto dropped on his knees and vowed by all the saints that \$80 was every cent there was in the house. Vasquez took this, and then made him produce his account-book, which soon revealed the fact that the money obtained from the sale of his wool had been placed on deposit in Temple & Workman's bank, Los Angeles. He then compelled the old man to write a check for \$800; then taking the trembling nephew one side, he directed him to saddle a horse, and ride to the city, go to the bank, and draw the money on the check, and bring it to him. He cautioned him not to get nervous and exhibit emotion that would excite suspicion, and defeat the scheme, assuring the young man that, if he failed in the mission, he would hang the uncle, without delay, and would certainly kill him at the first opportunity.

The young man fully believed Vasquez would fulfill his threats, and he did his level best to carry out his part of the scheme. His command of nerve, however, failed him. He was pale and trembling when he entered the bank, and, when he laid the check on the counter, the cashier saw that something was wrong. He stepped into the president's room, and stated his suspicion. The president saw that the signature was genuine, but remembered that Reppetto had never once sent a check to the bank. It was his invariable custom to bring his checks to the bank personally.

Sheriff Rowland happened to be closeted with the president. The young man became impatient at the delay, and entering the room insisted on the immediate payment of the check, saying that his uncle's life was at stake, and that he saw him sign the check and knew that it was genuine. They tried to reason with the trembling youth, assuring him that if he had got into trouble and done anything wrong, they would befriend him and keep it secret if he would make a clean breast of it. He now broke down entirely, and owned up that his uncle was at Vasquez's mercy, and that the robber would take his life if the money was not forthcoming.

Requesting the president to detain the boy as long as possible, Rowland hastened to his office, and soon organized a posse of deputies and led them to the ranch. The president supplied the nephew with 25 double eagles in a little canvas sack, and he made the best possible time to get back, hardly daring to hope that he would find Reppetto still alive.

When he entered the house and poured the gold pieces out on a table, Vasquez eagerly counted them and exclaimed angrily:

"Why, here's only \$500! The check called for \$800! How is this?"

The truth was told frankly, the boy saying he had done the best he could. Vasquez, saying that when a man tried to do the best he could for him he could ask no more, looked out the window, and discovered the Sheriff and his posse just coming into view about a mile distant. He and his followers rushed out, vaulted into their saddles, and clapping spurs to their fleet horses, dashed away toward their chosen line of retreat, Moore's Trail, little dreaming of the terrible disappointment it was to prove to them.

I have briefly narrated their exploit in robbing Miles and Osborne on their way to the trail. They barely missed, by about five minutes, meeting ex-Gov. Stanford near the same spot. The Governor, who was interested in the scheme of settling a colony on the tract, had ridden out that day to inspect the ground in company with a party of Indianapolis capitalists. It happened to be their lucky day.

It would make this sketch too voluminous to describe the robbers' efforts to break through the barriers at the end of the trail they entered upon so confidently. When they had got to a point beyond the summit, and within two miles of the Tejuca, the trail suddenly ended. Under Sheriff Johnson, Maj. Mitchell, Detective Harris, W. E. Rogers and Sam Bryant of the Sheriff's posse boldly followed on the trail, sometimes getting a sight of the fugitives, but, of course, there was no possibility of flanking them, and as they were compelled to move in single file, the fugitives could hold them at bay at any point. Sheriff Rowland returned to the city to organize a party to head the robbers off if possible.

On the following day the robbers got their horses down into a deep gulch where they had to abandon them, it being impossible to get them out without tools with which to dig a trail. Chavez had attempted the dangerous feat of riding his horse diagonally down the steep side of the gulch. It slipped and fell to the bottom, a mangled corpse, its rider barely saving his life by leaping from the saddle to a ledge of rock. They struggled on foot to the Tejuca, and then hastened to the San Fernando Valley, where they dispersed.

The Sheriff's posse also lost one horse—Sam Bryant trying to ride his animal down the precipice. When it slipped Sam saved his bacon by springing from the saddle to the top of a tall spruce tree that grew in the chasm. They then sent to Sutton's ranch for axe, pick and shovel and soon made a trail by which they extricated the surviving horses of the robbers and their own and returned to the city.

Vasquez, himself, found shelter for two nights at the mansion of ex-Gov. Pico, and then crossed the Cahuenga range and lay for a time perdu near the city.

The writer, who had been enjoying several weeks' furlough from the drudgery of a newspaper office, received on the 16th of April a dispatch from Charles de Young—at that time managing editor of the San Francisco Chronicle—stating that Mr. Henderson was representing the Chronicle as correspondent with the Morse party, and requesting me to join Sheriff Rowland's party in the same capacity. I was courteously received by Sheriff Rowland, and for nearly a month our party was almost constantly in the saddle, and we became very familiar with the mountain trails in all directions. I believe that Sheriff Rowland had little hope or expectation of a capture being effected by our party on either of our daylight expeditions. Whenever news came that strangers were moving suspiciously we were sent out, and we were kept busy quite as much to occupy the attention of the public as for any real necessity—particularly that portion that was friendly to the fugitive. Meanwhile the Sheriff was quietly working on a more promising line. The Governor had increased the reward to \$8000 for the capture alive of Vasquez, and \$6000 in case he was necessarily killed in the attempt to capture him. Rowland was shrewdly using the temptation of this heavy reward where it was likely to prove effective.

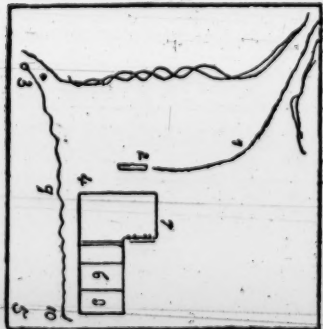
Vasquez, of course, learned of the presence of the Morse party in the northern part of the county, and soon satisfied himself, by a few night reconnoissances, that it was effectually barred from flight in that direction.

I must say here that this statement was made to me by Sheriff Morse some months after the affair was over. On relating it to Rowland, the latter denied emphatically that the information brought by Morse located Vasquez anywhere near the La Brea ranch, or assisted in any way toward finding him. He said that Mr. Morse was entirely in error about it.

But at last Rowland's patient efforts prevailed, and he discovered that Vasquez was stopping at the house of Greek George (George Allen), a little L-shaped adobe on La Brea ranch, near the base of the Cahuenga range,

about six miles northwest of the city. On the night of May 14th—just one month from the date of the Reppetto affair and the robbery of Miles and Osborne—we met in the office of Maj. Mitchell, in Temple block. A diagram of the house and location was exhibited and various plans discussed. It was decided that one party should be made up as follows: Under Sheriff Albert Johnson, Maj. H. M. Mitchell, Chief of Police B. F. Hartley, W. E. Rogers of the Palace Saloon, Constable Sam Bryant, Detective Emil Harris, G. A. Beers, representing the San Francisco Chronicle; D. K. Smith, a farmer. The latter gentleman had been employed that day, on account of not being known in Los Angeles, and had ridden out to Greek George's under the pretention of looking for grain to thresh. He had brought back a description of the premises, and the fact that he had found some five men there. Arrangements were made for our arms and horses to be in readiness at Jones's corral, near the western limits of the city, the arms being conveyed from the rear of a Commercial-street gun shop, by a circuitous route to the corral. The corral was kept closed, and no customers admitted that night, and no horses or carriages loaned out. Spies were watching our every movement. Finally, we were all to be at the corral ready to start at 2 o'clock the next morning, each man choosing his own time and route for getting there.

At the designated hour we filed out of the corral, silently wended our way across the country, passing Greek George's place to the right, or east, and entered a little cañon, the mouth of which opened on the plain at least a mile to the east of the house which Vasquez had been making his headquarters. At daylight Mitchell and Johnson left us, and by a side cañon obtained a favorable position in the chaparral on the mountain side, and through a powerful field-glass closely watched the house and took note of what the people there were doing. An unusual fog came across the country from the sea and interrupted the view for a long time, and it was nearly noon when they returned and reported. They had seen two men about the place, each of whom answered the description of Vasquez. One of them had mounted and ridden off to the west. They believed the man was Vasquez. During the forenoon two Mexicans had driven a four-horse team and deep-box wagon up the cañon, after a load of wood, and we had detained them. Now Mitchell proposed that he would take Mr. Smith and by a detour through the side cañon, get beyond the house and follow the man who had ridden off, while the remaining six would surround the house. This was agreed to. Mitchell and Smith left us, and directing the Mexicans to turn their team about, we left our horses in charge of a bee-rancher near the mouth of the cañon, and the six of us climbed into the wagon and found that by close packing we were effectually hidden by the high box, and began to feel some confidence in our undertaking. The Mexicans were warned not to make any signal, or indicate by their actions that there was anything unusual going on. After a disagreeable jolting, and a good scorching from the hot sun, the wagon stopped about 50 feet north of the house, and we lost no time in scrambling out of our disagreeable close quarters. The following diagram will explain the situation:



GREEK GEORGE'S HOUSE.

EXPLANATION: (1) Route of wagon-load of deputies; (2) point where wagon stopped; (3) Gen. Howard's stolen horse; (4) where Bryant, Johnson, Rogers and Harris reached the house; (5) where Hartley was hidden; (6) where Vasquez was eating; (7) point from which Harris, Johnson, Rogers and Bryant advanced on the kitchen; (8) where Vasquez jumped through the window and ran around west side of the house to get to his horse; (9) point where Beers was stationed; (10) where Vasquez surrendered.

When the wagon stopped, Hartley, bending low, hastened to the west of the house and took up a position in the weeds about 100 feet from the west side of the house; Harris, Johnson, Rogers and Bryant crawled directly to the north side. I got out on the side farthest

from the house, passed the team and struck the trail that led from the house to where a gray horse was tethered. It proved to be the property of Gen. Volney E. Howard, and had been stolen a year before. I turned on the trail and went to the northwest corner. Discovering a window in the west side of the house I stepped down to it and looked in. To the right was a narrow bed, and behind it a new Winchester, thrust diagonally. In front of the bed a dagger was sticking in the floor. Taking it and a memoranda book I found under the pillow, I stepped back to the corner. The boys reported that two men were eating at a table in the kitchen, with their backs to the door. If I would hold the corner, they would try and steal a march on them. I agreed, and they stealthily moved around the east end of the building. I soon heard the smothered sound of a gun exploded in the house, followed by a rush, and the next moment the form of Vasquez, coatless and hatless, came running around the south end and up the trail toward me. I made a quick, warning motion with my right hand. He hesitated, and then, gathering himself for a determined rush, he sprang toward me, evidently determined to get to his horse. I raised my carbine and pulled the trigger, intending to give him a line shot. Just as I pulled he threw himself to the ground and raised both hands, exclaiming:

"No shoot! Me go in!" Hartley had fired at the same moment, his double-barrel shotgun, loaded with buckshot. Vasquez had spoken too late. Fortunately, however, none of the wounds were fatal. Throwing up another cartridge I hastened to him. My bullet had inflicted a slight wound on the left shoulder-blade, while Hartley's buckshot had struck in several parts of the bandit's anatomy—all the wounds being painful, but neither of them dangerous. It was stated by the others that Harris was in advance in the stealthy move on the kitchen; the woman waiting on the table at last saw them and tried to shut the door, when Harris shoved it open with the muzzle of his gun. Vasquez sprang like a cat through a small open window in the south end, miraculously escaping a shot aimed by Harris. I remember now that Harris claimed that some of the buckshot were from his shot. It is quite probable, although the bandit told me that he was not hit until he got out door. I placed little dependence, though, on his statements. Corona saved himself from a possible shot by holding up a little child as a shield when the captors entered.

I hastily dressed his wounds as he lay stretched on a sheepskin in the shade and then the house was searched. In a vest that had been hastily thrown under a bed Harris found Miles's \$480-gold watch and a 50-cent piece. In a lumber-room we found several fine saddles, lariats, etc., some fine revolvers and several new improved Winchesters and a lot of ammunition.

Obtaining a spring-wagon and a mattress from an adjacent house, the wounded man was placed upon it, with his comrades or followers to give him water from time to time, and getting our horses from the cañon and being rejoined by Mitchell and Smith, we returned to the city with our important captive. Throughout the affair Vasquez manifested entire control of himself. He had wonderful nerve, never exhibiting a symptom of fear nor expressing pain by even a wrinkle of the brow.

There was intense excitement in Los Angeles when the news was spread that the redoubtable Vasquez had been captured and was lodged safely in jail, and for days there was an incessant stream of visitors, many coming from distant parts of the State. As a precautionary measure he was never left alone, one of his captors remaining in his cell with him during the day, and another during the night. He was always affable and ready to converse. As soon as his wounds were healed sufficiently he was removed to Salinas, Monterey county, it being decided to put him on trial for the Tres Pinos murders. There being danger of his being lynched there, however, and his counsel deeming it imprudent to have him tried there, a change of venue was obtained to Santa Clara county, and he was transferred to the jail at San José. On his trial he was convicted of murder in the first degree and the jury affixed the death penalty.

At San José I was permitted to spend several days alone with him, while writing a biographical sketch for a New York publishing house, and I had a good opportunity to study his character. In many respects he was a remarkable man. He told me that he was thoroughly disgusted with the life he had led, and he had no respect, not the slightest, for the class of men from whom he selected his assistants when he planned a robbery. His original boyish idea was that he could incite a revolution among the Spanish-speaking population, and recover Southern California from

the United States. He had several times undertaken to lead an honest life, but found that some one was always sure to recognize him and reveal his identity. The night before his execution he dictated an address to his old companions, in which he urged them to nourish no feelings of hatred or revenge toward his captors, and advised them to take warning from his fate, and abandon their lawless ways. On the scaffold his demeanor was that of a man thoroughly cool, natural and self-possessed, with no signs of anything like bravado or assumption of indifference. His capture had an important effect on that class of criminals in this State, and it will prove an interesting subject for a future sketch to describe in detail what became of some of his followers.

I have often heard great interest manifested as to how the \$8000 reward was divided. I have no hesitation in gratifying that laudable curiosity. I can say that my observation of the other members of Sheriff Rowland's posse led me to feel that they were full of enthusiasm to effect the capture, being animated by that *esprit du corps* that usually actuate similar intelligent bodies of men who are before the public—the certes of critical observation—and they were ready to undergo any amount of fatigue, or incur any danger, that promised to redound to the credit of their county and the Sheriff under whom they served. As for myself I was pretty thoroughly imbued with the spirit of emulation the Chronicle had manifested in its struggle to outstrip its rivals, and considered it an honor to represent it in the enterprise of breaking up this nest of outlaws that had so long defied the authorities. I don't believe any of us were wild enough to indulge any high hopes of getting much of the reward. However, when fortune did give it to us we received it thankfully. Doubtless it will surprise most people to learn what we did with it.

There were nine of us to divide it between, including the Sheriff, and then the man who betrayed the robber made ten. We gave the latter his promised share, and then figured up all the expenses the county had been to for the expedition of 1873, when Vasquez was headed off at Little Rock Creek, and all the expenses of our numerous expeditions, and, after deducting the sum from the Governor's reward, were quite content with the remainder.

GEORGE A. B.
Los Angeles, Dec. 27, 1889.

Prices of Lumber.

The following are the prices delivered at the yard:

Rough Oregon pine.....	\$25 00
Rough redwood.....	25 00
Rough clear Oregon pine and redwood.....	37 50
Flooring, Oregon pine.....	37 50
Flooring, Oregon pine, second quality.....	32 50
Tongued and grooved redwood.....	37 50
Tongued and grooved redwood beaded.....	37 50
Surfaced redwood and pine.....	37 50
Doubled surface.....	40 00
Doubled surface, half inch.....	35 00
Rustic.....	37 50
Siding, first quality.....	32 50
Siding, second quality.....	27 50
Refuse lumber.....	15 00
Pickets, rough.....	25 00
Pickets, surfaced.....	37 50
Rough spruce.....	27 50
Rough spruce, half inch.....	25 00
Clear spruce, one inch.....	40 00
Clear spruce, half inch.....	35 00
Posts, each.....	32 1/2
Lath, four feet, per M.....	4 50
Lath, six feet, per M.....	9 00
Lath, eight feet, per M.....	12 00
Shingles, four bundles to an M.....	3 00
Shakes, split, per M.....	15 00
Shakes, sawed, per M.....	17 50
Moldings, per inch.....	%

From these prices discounts of 10 per cent. are given in special cases for cash.

The Los Angeles Valley.

[Chamber of Commerce Pamphlet.]

This is the most productive, probably, in the State, and is destined at no distant day to teem with a dense population. This valley is over 50 miles long and about 20 wide, so that it contains 1000 square miles, or 640,000 acres. Of this land, 100,000 may be classed as grazing, 200,000 grape and semi-tropical fruit land, and 340,000 acres superior corn land, equally adapted for barley, rye, oats, millet, potatoes, hops, etc. It is estimated that at least 250,000 acres of this land can be irrigated. It lies most favorably for purposes of irrigation, being a level plain, with a fall of 10 feet per mile in a southerly direction. Many very large ditches are already, and others are now being, constructed in this valley, leading the water from the rivers. The supply of artesian water in this valley is the most abundant yet discovered in the State, flowing wells being obtained over large areas at depths ranging from 100 to 500 feet. The soil, as a rule, is a rich, sandy loam, easily worked and very productive. For fertility of soil, variety of productions, favorable climate, geographical advantages, and in many other respects this is the richest endowed valley in Southern California.

RAILROADS.

A CURSORY GLANCE AT CALIFORNIA LINES.

Greatest Railroad Center on the Coast
—Two Transcontinental Lines
Now Here and Two More
Coming—Local Roads.

LOS ANGELES is already the greatest railroad center on the Pacific Coast, and the indications are that before 18 months shall have passed two more great transcontinental roads will make this their terminal point. The Southern Pacific and the Santa Fé are already here, and their branch lines are running out in all directions; the Gould system and the Union Pacific will be the next to come. Besides the two trunk lines that are now here, the Burlington, the Texas and Pacific, the Alton, the Northern Pacific, the Union Pacific and three or four other roads have offices here, and all of them are doing a good business. Four years ago railroad men thought but little of Los Angeles, but they have had their eyes opened, and now there is a scramble all along the line to see who will get the best foothold. That the Union Pacific Company has decided to extend its Utah lines to Los Angeles there is not the slightest doubt, for contracts have been let from Milford in Southern Utah, and large gangs of men are now at work. The other day a contract was let at Barstow for a section of road to meet the Milford division, and it is reported that men and material will be sent to Los Angeles very soon, so that road building will be going on at three points at least on the line. This new road will open up some of the finest mining country in the world, and will put Los Angeles and Salt Lake in direct communication with each other. Not only that but it will be the means of putting coal down in Los Angeles at the low rate of from \$3 to \$4 per ton, and, as immense iron mines will be opened up, this city will soon become the greatest manufacturing city on the coast.

That Mr. Gould is coming here there is but little doubt. It has been known by those nearest him for some time past that he has an ambition to operate great roads in both China and Japan and the extension of his line to the Pacific Coast will be the first step. Whether he will go to San Pedro harbor or San Diego to establish his steel-rail factories is not known; but that he has something of the kind in his head there is no doubt, and whichever place he may go to, Los Angeles will be benefited. This move on the part of Mr. Gould will be the means of bringing a good portion of the Chinese trade to Southern California, for they cannot get iron for their roads in China and Japan near so cheap as they can if iron works are established here, and the only thing that has kept steamers away from Southern California in the past is because we have had nothing to ship. Taking everything into consideration Southern California never had such a bright future before her as at the present time from a railroad point of view.

Both of the transcontinental roads now running into Los Angeles are in a better condition than ever before. The Southern Pacific extends from San Francisco to New Orleans, where it makes connection by steamer and leased lines with New York city. This road has powerful connections all over the United States and is one of the best operated roads in the world. It is managed by men who have grown up in the railroad business. All of its employes are thoroughly trained men, consequently the traveling public is well treated. It already has large machine shops in this city and 60 acres of land were secured in East Los Angeles something over a year ago, and it is believed that more extensive shops will be erected here very soon. There was some talk a short time ago about removing the new Wolfskill depot to the old San Fernando depot site, where a grand union depot was to be erected, but the local managers of the Southern Pacific deny this, and say the Wolfskill is to remain where it is. That there is to be a union depot in this city in the near future there is no doubt. With four trunk lines running into Los Angeles, it will be impossible to get along without such a depot. At present there are only two trunk lines here, and yet the depots are separated and scattered about the city, and travelers are subjected to more or less trouble in making transfers. The Santa Fé people do not fancy their depot site and that is the main reason why they have not erected a large depot. They are strong

believers in union depots, and if the Southern Pacific Company does not go in with them they will certainly induce the Union Pacific to join hands in a union depot scheme.

The Southern Pacific Company operates the following lines which are owned by the company:

	Miles.
California Pacific Railroad.....	113.44
Central Pacific and branches.....	1,389.65
Northern Pacific and branches.....	389.32
Oregon and California.....	474.80
Southern Pacific of California South- ern division.....	953.30
Southern Pacific of Arizona.....	384.74
Southern Pacific of New Mexico.....	171.06
South Pacific Coast.....	104.00
Southern Pacific of California, north of Goshute.....	290.71
The Los Angeles branches are:	
Los Angeles to San Pedro.....	25.00
Los Angeles to Santa Ana.....	34.00
Los Angeles to Santa Monica.....	18.00

The Santa Fe Lines.

The Atchison, Topeka and Santa Fé system was built by Boston capital and enterprise. In its construction and management no expense has been spared. Its arrangements to serve its patrons acceptably are as complete as circumstances would permit. Originally its principal eastern terminus was at Kansas City, but it has completed a bee-line to Chicago. The line through New Mexico gives it access to several extensive coal fields, the best so far of any that have been developed in that region. It runs to all the most important towns and through the best portion of New Mexico. At Albuquerque it connects with the Atlantic and Pacific, which is under its management and which runs to Mojave and then connects with the Southern Pacific. The Southern California at Barstow connects with the Atlantic and Pacific and runs to San Diego, and from San Bernardino follows down the San José and San Gabriel Valley to Los Angeles, and thence to the ocean at Ballona and Redondo Beach. This system therefore has a continuous route from the great cities of the Northwest to the Pacific Ocean. By way of San Bernardino it reaches San Diego, and also direct from Los Angeles by way of the Surf line. During the year 1888 the Santa Fé was very active in building lines in Southern California, and its heavy expenditures in Chicago and elsewhere somewhat cramped it financially, but through the assistance of the large banking houses of Baring Bros. of New York and London, and Kidder, Peabody & Co. of Boston and New York, the company has been completely reorganized financially, and promises soon to renew its former aggressive spirit and further increase its mileage in California. There is no doubt but that it will build a coast line to San Francisco, for great inducements have been offered, and if the Santa Fé does not go there the Union Pacific or Jay Gould's line will, for the people of the north have made up their minds to get an opposition line, if such a thing is possible, and even now their agents are at work trying to induce either Gould or the Union Pacific to give Los Angeles the go-by and build to San Francisco.

The Santa Fé Company now operates 476 miles of road in Southern California, as follows:

	Miles.
Barstow to National City.....	211
San Bernardino to Los Angeles.....	83
Los Angeles to junction near Oceanside	63
East Riverside to Orange.....	41
San Bernardino Valley branch, San Bernardino to Mentone.....	12
Redondo and Ballona branches, Los Angeles to Redondo and Ballona.....	26
Escandido branch, junction near Oceanside to Escandido.....	21
San Jacinto Valley branch, Perris to San Jacinto.....	19

Local Roads.

The San Gabriel Valley Rapid Transit Railroad is a narrow-gauge line from Los Angeles to Monrovia. It was built by local capital in 1888, and is a well-equipped little road. It runs by way of Boyle Heights, East Los Angeles, Ramona, Alhambra and Arcadia to Monrovia, a distance of 16 miles, and is in a flourishing condition.

The old County road or Los Angeles and Pacific road was operated during the past summer, but it got into hot water with its creditors some four months ago and was put in the hands of a receiver and shut down. It is uncertain when the road will be operated again.

The Los Angeles and Glendale Railroad runs from Downey-avenue bridge up the river to Glendale, a distance of seven miles. This is now a narrow-gauge, but its owners are making it standard gauge, and will run a branch to Pasadena, and also one up into the mountains to picnic grounds. As soon as the line is completed, trains will be run hourly to Pasadena, and every 30 minutes, on Sundays, to the mountains.

A new standard-gauge line from this city to Redondo Beach (about 17 miles) was built by the Redondo Beach

Company during 1889, but has not yet been operated. The aggregate length of railroads in Southern California is about 1100 miles, and in 1890 the chances are that several hundred miles will be added to this mileage.

How to Get Here.

The gateways to Southern California from the East are via Omaha, Kansas City, St. Louis, Memphis and New Orleans.

The roads leading from these points are as follows: From Omaha: The Union Pacific in connection with the Southern Pacific via Ogden, the Burlington and Missouri Railroad in connection with the Denver and Rio Grande, via Denver and Ogden, thence via the Southern Pacific.

From Kansas City: The Atchison, Topeka and Santa Fé via the Atlantic and Pacific and Southern California; the Union Pacific via Denver and Ogden and the Southern Pacific; the Chicago, Rock Island and Pacific via Colorado Springs and the Denver and Rio Grande; the Missouri Pacific via Pueblo and the Denver and Rio Grande; also via Pueblo and the Atchison, Topeka and Santa Fé.

From St. Louis: The St. Louis and San Francisco in connection with the Santa Fé route via Burton and the Atlantic and Pacific and Southern California. The St. Louis, Iron Mountain and Southern, in connection with the Texas Pacific via Texarkana to El Paso, thence via the Southern Pacific. The Wabash in connection with the Santa Fé route, as above described from Kansas City. The Chicago and Alton in connection with the Santa Fé route via Kansas City.

From Memphis: The Kansas City, Fort Scott and Memphis in connection with the Santa Fé route via Kansas City. The Memphis and Little Rock in connection with the St. Louis, Iron Mountain and Southern, Texas Pacific and Southern Pacific.

From New Orleans: The Southern Pacific via its own line. The Texas Pacific to El Paso and thence via the Southern Pacific. The Texas Pacific via Fort Worth and Denver to Trinidad, thence via the Santa Fé route.

It is hardly necessary to mention the different railway lines leading to these important gateways, as the traveler will be governed largely by the line which is the most direct from the point of starting.

To Southern California from St. Louis and the territory north and east, the quickest time is now made via the Atchison, Topeka and Santa Fé, which has lately reduced its time from Kansas City to 78 hours.

From St. Louis the time is about the same via the different lines.

From New Orleans the difference in time is in favor of the Southern Pacific.

The Atchison, Topeka and Santa Fé in connection with its Chicago line is now running through sleepers from Chicago to Los Angeles, and also additional sleepers from Kansas City to San Diego.

SAN DIEGO MINES.

The Julian and Banner Mining Districts—The Leading Gold Camp.

[The following matter was received after the close of the article elsewhere on "Mines and Mining."—Ed.]

During the past year the district about Julian and Banner, in San Diego county, has taken renewed life and has gone forward at a remarkable rate, and is now one of the foremost bullion-producing districts in the State.

The prominent mine of the district is the Stonewall, situated about eight miles from Julian. This mine is opened quite extensively, and it is said has upward of \$3,000,000 in sight. It is possible this may be true, though the amount is large. Other prominent mines in the district are the Ready Rellet, Redman and Cincinnati Bella. The latter property has recently been bought by syndicate of Los Angeles and Pasadena gentlemen, who will operate the splendid prospect for all there is in it.

The Cuyamaca railroad will improve the facilities for operating the Julian mines, and the district, which, until a year or so ago, had been inactive for a period of six or seven years. The Gold King and Gold Queen and the Owens mine are also quite well known, and may, during the coming year, become "going concerns," as the English people say. Julian seems to be entering into a new period of prosperity, which may last for many years.

The country rock is a metamorphic micaceous rock, with some granite. The veins are of variable width, and carry almost exclusively, gold. Specimens of extreme richness are common, and, as a matter of course, these tend to increase the average value of the milling rock in a very substantial manner. One-hundred-dollar rock is not at all uncommon in this district.

Several years ago this district earned quite a favorable reputation as a bullion producer, but, owing to a complication of causes, it took a backset, but it is now forcing ahead on a more conservative and substantial basis, and is likely to be a steady producer for a period of years, as much more is now known concerning the process of treating the rock, and the conditions are becoming more favorable every year for economical operation. Julian is at present the leading gold camp in Southern California.

CALIFORNIA FOR HEALTH

CLEAR REASONS FOR ITS UNDOUBTED SUPERIORITY.

The Climate Is the Great Factor—Fine Days the Rule—Some Striking Statistics—A Low Death Rate.

TO OUR careless critics in the eastern press, who assume that everything here was lost in what they call a collapsed boom, it is proper and educating to give a few facts and figures to show that at least our climate, our glorious climate, remains, despite the bad influences of boomers and irresponsible writers.

Any statements made to prove that our sunshine and health-giving breezes are the same as they were a few years ago will seem trite and threadbare to people who actually live here.

But they will interest thoughtful Easterners who have never seen Southern California; and perhaps, too, correct some of the erroneous notions of those restless visitors who were in such a hurry that their knowledge of our country had to be evolved from their own inner consciousness.

Geographically this is a territory somewhat larger than New York State; about the latitude of the Mediterranean and Northern Africa.

On the west flows the warm Japanese current, the *Kuro Siko*, which keeps the water of the Pacific along this coast at an even temperature the year round; it never varies more than two degrees.

On the north are broken ranges of mountains running eastward, sufficiently high to cut off the northern winds and storms, which would otherwise sweep over Southern California. On the east is a plateau and a desert region, beyond which lie the high mountains of Arizona and New Mexico.

On the south is the Pacific, and more easterly are mountains.

Thus it will be seen Southern California is protected from cold storms on the north and east, while it is open to the warm influences of the Pacific on the west and south.

One result of this topography is an equable temperature; our winters are mild, and summers are never oppressively hot. For information, we may take the temperature of Los Angeles month by month, for a period of six years (1879-1884) as recorded by the Signal Service office. The average for the period is as follows:

January.....	52.0°
February.....	53.2°
March.....	53.3°
April.....	57.8°
May.....	61.7°
June.....	65.6°
July.....	67.9°
August.....	69.9°
September.....	67.4°
October.....	62.2°
November.....	56.9°
December.....	54.9°

Here we see an average range of less than 18° between the summer and winter temperatures; the lowest recorded temperature during the time was 28° F.; the highest 103°.

A greater change than 18° is frequently noticed in the diurnal variations—from day to night. These changes are often a source of discomfort to strangers, but as they occur regularly, it is an easy matter to guard against them by proper clothing. I have never known an instance where harm resulted from the cold nights here, when reasonable regard was paid to the fall of temperature.

At night two or three blankets are essential to comfort, and there is really not a great difference in the night temperature between summer and winter.

The great secret of our climate is the sunshine. The records of the Signal Service office show that in Southern California there are more sunny days and less cloudy and rainy days than anywhere else in the United States.

Statistics show that Los Angeles averages about 285 days per year absolutely cloudless; while New York has 102, Jacksonville, Fla., 102, and Aiken, S.C., only 96. In other words, Southern California has about three times as much sunshine as these places, and only one-third as many cloudy and rainy days. Can a man in health or a man out of health ask for any better home?

The rains occur between the 1st of December and the latter part of March; very rarely a shower comes up during the summer. During the so-called rainy season about 20 inches of rain falls; but the rainfall is not continuous; as a matter of fact, in the rainy season more than two days out of three are brightened by the most perfect sunshine in an atmosphere as clear and pure and bracing as can be imagined. The showers and sunshine

unite in stimulating the most marvelous vegetation; flowers and fruits and vegetables in the utmost profusion are the result. After the "rainy" season is over we have eastern June days for several months, and the perfect luxury of living is realized; invalids get strong, and strong men stronger.

The warmest month is August, but even then while the sunshine is hot the atmosphere is cool, and the nights are invariably comfortable the year round. Refreshing sleep is always possible; can the same be said of any place in the Ohio or Mississippi valleys, or even in the Eastern States? By many the summers in Southern California are considered pleasanter than the winters. However this may be, the fact remains that outdoor life is possible and enjoyable here for 300 days of every year.

The bright sun and pure ocean breezes render the atmosphere aseptic, as medical men say—that is, free from poisonous and injurious elements. Physicians acknowledge that nowhere is there found purer air than that here; this atmospheric condition, in connection with our mild climate, in which extremes of heat and cold are impossible, explains the fact noticed by many visitors—physicians especially—that people here are stouter and more healthy-looking than those living East. This fact was impressed upon me a few years since in a practical way. In connection with the medical supervision of an eastern life insurance company doing a large business in California, I noticed that the applicants for insurance were almost invariably over weight, according to the adopted standard.

On full investigation my observations were confirmed, and the standard was so modified as to admit these applicants who were in every way acceptable except that they weighed on an average 15 to 20 pounds more than eastern men of the same height.

Many observers have remarked that children here look ruddier and stronger than those living where the climate is less equable. Children's diseases are not common and are rarely severe. Dr. D. C. Barber, who practiced a number of years in the Ohio Valley, and for the past two years has had charge of the medical dispensary connected with the college in Los Angeles, whose opportunities for observation have been very large, says there is not one-fourth of the sickness among children here that prevails in his former home. The less extensive experience of other physicians confirms his statement. Cholera infantum is practically unknown here; in the East it is the most dreaded disease of young children; scarlet fever, diphtheria, whooping cough and measles usually run a mild course.

Epidemics are all but unknown in Southern California. The only modern one of any note was what was heralded far and wide two years ago as "the dreadful smallpox scourge." Well, it was bad, as all scourges are, but its blackness was rather emphasized by rival and competitive communities, east and west. How many deaths occurred in Los Angeles from the "dreaded scourge" during the months it raged? Exactly fifteen! Not one of whom, by the way, was vaccinated. (This, I think, is about the number of persons in an eastern city of the same size who die annually from freezing or sunstroke.)

Miasmatic diseases are very rare and malaria is hardly known. Many outsiders, and some who are inside, think Los Angeles is unhealthy because "there are no sewers." They ought to know that our city has a good many miles of sewerage, though, perhaps, not enough for today. But I have never been able to trace any particular case of infectious disease to our bad sewerage; and I doubt whether any other physician has. It is true that a few months ago, just before our citizens were to vote on the question of bonds for an elaborate and costly system of sewerage, an alarming outbreak of diphtheria and other dreaded filth diseases was reported from certain sections of the city. Two facts, however, served to ease the minds of thoughtful people; one was that the sudden increase of cases suffering from these diseases was always in the practice of such physicians as most strongly favored the sewer bonds, and the other was the pleasing information supplied by the official health reports of the city, which showed no appreciable increase in deaths from the dreadful diseases. Nothing further needs to be said, except that, as soon as the voting was over, the epidemic subsided rapidly, and the chief damage done was to injure our fair name abroad.

Typhoid fever is not common nor usually severe; digestive diseases are not severe as a rule. Dyspeptic persons are almost always benefited by a sojourn in California, owing in a measure to the character of food always at hand. The year round the markets afford an endless variety of fresh vegetables and fruits of every de-

scription. Meat, fish, poultry and game are always to be had at reasonable prices and of most excellent quality.

Nervous diseases are almost invariably relieved by a residence here; the possibility of outdoor exercise in the pure sunshine is an important element in the cure of this class of disease. The same factor is of great advantage to sufferers from chronic rheumatism and neuralgia; they do well here. Southern California abounds in mineral springs—warm, hot and cold, alkaline and saline, chalybeate, sulphur and calcareous waters, containing their salts in various proportions and combinations. In this one territory may be found all those waters which have proved useful in the long list of diseases amenable to hydro-therapeutics.

Acute rheumatism occurs but rarely, and seems to yield to treatment more readily than was my experience in the East. In its treatment the greatest climatic benefits are realized usually farther inland than Los Angeles; a hot, dry climate, free from wind, works wonders in these cases—such a region is found east of here, toward the desert.

Asthma and chronic bronchitis are, I think, invariably relieved by a residence here. These cases usually do best along the protected foothills north and east of Los Angeles; the Ojai Valley and the neighborhood of Beaumont are famous resorts for these patients; so are the high lands lying back of San Diego.

Acute inflammation of the lungs is rare here. A physician of large experience, during a five years' residence in Los Angeles, told me he had seen but five cases of acute pneumonia. In my own practice, devoted chiefly to lung diseases, I have seen but six cases of acute pneumonia and pleurisy in four years. Evidently the micro organism pneumonia does not thrive in Southern California. The large majority of invalids who come here suffer from chronic inflammation of the lungs—consumption (tuberculosis) or chronic pneumonia (fibroid consumption).

Leading authorities are agreed that these diseases rarely, if ever, originate here. The health records show that our consumptives are almost, without exception, non-residents. The great question to be decided for every invalid is, "Can my case be benefited by a sojourn in California?" I will not say that every consumptive can be benefited here, although I firmly believe that some invalids with cavities in their lungs will get well; I know that this is possible in the East. But I will say that most consumptives will have a better chance here than anywhere else in the country. But before one comes he ought to realize he is going far from home, among strangers, and for a sick man this is a great and sometimes a disastrous undertaking. If he is beyond hope and cannot live long, his physician ought to dissuade him from the delusive and fruitless venture. He would better die at home. But if he is not in the last stages of the disease, and can travel and live with the comforts which a sick man ought to have, this is the place for him; he will prolong his days and may get well. Every physician here has seen such remarkable recoveries that only the worst cases seem hopeless. Many of our leading business men of Southern California were once invalids here for their health. It was not medicine that cured them, and probably not climate alone; the same remedies which are used in the East, taken with our climate, which can only be used here, will do wonders. Every physician here can give instances of unlooked for benefit and recovery from apparently hopeless disease; and many of our robust-looking citizens today were once rejected by some life insurance company on account of "weak lungs," a "hemorrhage," or some other such evidence of precarious health.

For persons who inherit a weakness of the lungs, or fear consumption on account of family diathesis, residence in Southern California cannot be too strongly urged. They will be cured of their dreaded heritage, and their children will grow up free from disease.

In closing, an allusion may be made to a paper recently read before the Los Angeles County Medical Society by Dr. John R. Colburn. It gives statistics from the official health reports for Los Angeles for 10 years past. The Doctor shows that the average annual death rate for the past few years is about 11 per 1000. This includes consumptives dying here, 92 per cent. of whom are non-residents. It is safe to say that no other city of 80,000 inhabitants can begin to compare with this remarkably low death-rate. And we may go a step further and say that there is not a community in the world that can make such a favorable showing, all facts considered. Truly, Southern California is the home for the invalid and a paradise for the man in health.

JOHN L. DAVIS, M. D.
Los Angeles, December, 1889.

SAN BERNARDINO,

THE LARGEST COUNTY IN THE STATE OF CALIFORNIA.

Variety and Abundance of Natural Resources—The Horticultural Interest—Products—Mines—Water—Land—Climate.

THE immense area of San Bernardino county, together with its varied and rapidly-accelerating development, make it a matter of difficulty to obtain accurate and complete statistics without an official census. Even with that—as Talleyrand observed of our national statistics in his day—so rapid is the progress, that by the time the figures can be collated and published the county will have grown away from them. But in lieu of an official census the statements following are believed to be from reliable and conservative sources.

It is but recently that railroad extension has made possible the development of the vast resources of this county, whose deserts, mountain ranges and fertile valleys and plains cover an area greater than the combined areas of Massachusetts, New Jersey, Connecticut and Delaware. Now, 418 miles of trunk lines and branches are operated by the Santa Fé and the Southern Pacific, and steam motors run on 25 miles of local tracks. The activity following their construction may be inferred from the fact that the assessed valuation of the county rose from \$11,819,842 in 1885 to \$23,267,955 in 1889.

THE HORTICULTURAL INTEREST.

There are already under cultivation about 65,000 acres of land, and although the gross returns of the mines exceed somewhat those of any other department of industry for 1889, Horticultural Commissioner W. E. Collins estimates that of the entire assessment of the county 76 per cent. is assessed upon those portions devoted to the horticulture branch of agriculture. In his report the Commissioner gives a tabulated statement of the acreage set to fruits, but omits three school districts and some dry ranch territory; also the figures for nectarines, which cover at least 62 acres. The following is the table:

	Acres.	Trees.
Peaches.....	1,042	26,078
Pear.....	415	44,861
Apple.....	1,393	124,321
Apple.....	172	15,222
Pg.....	145	8,567
Walnut.....	164	7,222
Olive.....	118	11,224
Prune.....	139	23,445
Blackberries.....	31	
Strawberries.....	40	
Raisin grapes.....	3,774	
Wine grapes.....	2,674	
Plum.....	14	13
Guava.....	1	1,090
Chestnut.....	10	40
Cherries.....	12	1,297
Almonds.....	8	817
Lemons, planted 3 yrs or over.....	24,766	24,766
Oranges, planted 3 yrs or over.....	381,953	381,953
Orange p. planted 3 yrs or over.....	472,824	472,824

Total.....21,064 1,316,889

In addition there are in the county and ready for the market in 1890, 426,356 trees; in 1891, 591,973 trees; ready at a later date, 2,516,000 trees.

RESOURCES—WEALTH—IMPROVEMENTS.

Something of the present general activity can be seen from the following facts gathered by J. C. Scott, secretary of the San Bernardino Board of Trade, who for several months has been engaged in ascertaining, as nearly as possible, the wealth and resources of the county. The table indicates closely the character and extent of the leading horticultural and town improvements during 1889:

3422 acres orange trees planted this year—cost, not including land and water.....	370,000
64 ac. as lemon and lime trees planted.....	6,400
1351 acres planted to other trees and to vine.....	42,000
Water—development of, laying pipe, making canals, tunnels, etc.....	530,000
Buildings—residences and business houses.....	922,000

Total improvements.....\$1,936,400

It will be noticed in the year's planting, orange trees greatly lead all others, and they will undoubtedly continue to do so, as sections of the county are preëminently adapted to citrus culture, and the work is justified by unrivalled success in the past. The following table, compiled by Mr. Scott, is approximately correct as showing the relative orange acreage of the leading districts and the distribution of the acreage set in 1889—the acreage set representing about 390,000 trees, which cost on the average \$1.10 apiece:

Districts—	Acreage Set in 1889.	Acreage Previously Set.
East S. B. Valley.....	1,000	600
Rialto and S. Rialto.....	641	153
Ontario.....	450	850
South Riverside.....	420	200
Riverside.....	411	4,594
Highlands.....	200	384
East Riverside.....	75	325
West Riverside.....	30	90
Colton.....	110	250
Cucamonga.....	50	100
Edwanda.....	125	125
Scattering.....	50	100

Totals.....3,437 7,770

The Riverside Press estimates the cost of preparing the land and setting the trees at about \$50,000, making a total outlay of \$380,000 in buying and setting orange trees alone.

ORANGE SHIPMENTS.

The shipments of oranges last year are indicated by figures furnished from the railroad offices as follows:

Stations—	Boxes.
Riverside.....	261,661
Redlands.....	12,374
Drew.....	6,446
Colton.....	5,456
San Bernardino (Highlands Fruit).....	4,030
Nahant.....	1,830
Mound City.....	975
Broken lots.....	8,530
Local consumption and waste, estimated.....	10,000

Total product.....310,262

The total production equalled 1684 carloads. The entire shipments of the State amounted to 2787 carloads and of the county to 1049. This will be vastly increased from year to year as new orchards come into bearing. The past rate of increase in the product of Riverside, the principal point of production, is shown by the fact that her shipments for the season of 1889-91 were 29 carloads; for 1887-88, 760 carloads, and for 1888-89, 928 carloads.

QUALITY OF FRUIT.

The fruit is entirely free from smut, and its quality is attested by the fact that it always commands not merely the highest market rate, but makes a higher rate for its own, and by the fact that at the World's Exposition in New Orleans, at which all the orange and lemon-producing districts of the world were invited to compete—Florida being nearest and able to make the largest display, and Riverside preparing her exhibit on a week's notice—the Riverside fruit was awarded first premium—a gold medal and \$100—"for the best collection of oranges from any part of the world"; the first premium—\$100 and gold medal—"for best collection of oranges from any part of the United States"; the first premium—\$100 and gold medal—"for best collection of oranges from any part of California," and Riverside lemons received the first premium—\$25 and silver medal—"for best collection of lemons from any part of the world."

A majority of the districts just mentioned are showing equally fine fruit, and will add to the prestige of what is already the banner orange county of the world.

Next to citrus fruits in horticultural value come the products of the vineyard, for which complete tabulated statistics could not be obtained, as many raisin districts sell their fruit to packers in other districts.

PRODUCTION.

The following table prepared by Mr. Scott gives a close estimate of the income of the county from various sources during 1889, the orange and lemon "season" necessarily including the closing months of 1888:

310,262 boxes oranges.....	\$ 741,000
4250 box-s lemons and limes.....	17,000
300,000 boxes raisins.....	495,000
120 tons dried grapes.....	7,200
650 tons dried fruit.....	143,000
40,000 cases canned fruits.....	160,000
20,000 pounds English walnuts and almonds.....	6,750
300,000 pounds extracted honey.....	18,000
70,000 pounds comb honey.....	7,000
5200 pounds beeswax.....	1,000
230,000 gallons wine.....	57,500
10,000 gallons brandy.....	4,500
235,000 centals barley.....	165,500
Wheat and oats.....	27,500
3,000,000 feet of lumber.....	60,000
250,000 pounds of wool.....	57,500
Gold and silver.....	875,000
Borax, marble, onyx, building stone, brick and lime.....	250,000

Total income.....\$3,074,450

Of course, there is a large income of miscellaneous items not given above, some of which is exported, and brings in outside money, and much of it is consumed at home. For instance, the one item of alfalfa seed amounts to \$8000. Potatoes have been raised and shipped by the carload to Arizona, New Mexico and Colorado. No mention is made of hay, of which large quantities are raised for home consumption and for export, nor of the thousands of horses, cattle, sheep and hogs.

The earnings for export will average more than \$100 to each man, woman and child in the county.

MOUNTAIN REGIONS—WATER SUPPLY.

The mountain regions are the seat of many delightful summer resorts, and

not only contain untold wealth in minerals and lumber, but, above all, are the great water gatherers, upon whose store depends the cultivation of hundreds of thousands of acres of land. The water supply is obtained from five principal sources, i.e., natural streams, artificial mountain reservoirs, natural reservoirs tapped by artesian wells, ordinary surface wells, and seepage collected from moist tracts. The largest of the mountain reservoirs is at Bear Valley, the old dam being 20 feet through at the base, 60 feet high and 300 feet long, but built upon such a curve that it could withstand many times the present pressure. The difficulty of the original undertaking may be understood from the fact that the reservoir is 6400 feet above sea level, and that all cement and other materials except the granite had to be carried by teams and pack mules 100 miles, and across a ridge 7600 feet above sea level. The water stands 53 feet at the dam, covers 4000 acres to an average depth of 15 feet, and can irrigate 50,000 acres of land. Plans have been adopted for a new and larger dam, which is intended to control water enough for the irrigation of 150,000 acres. Other reservoirs are dependent upon this, and capital is continually developing fresh sources, the Riverside Water Company alone developing 911 inches during the year.

In addition to the improvements already mentioned are those of the mining districts, an instance being that of an English company's expenditure of \$100,000 or more in the rich Holcomb district, where hydraulic mining is to be carried on.

A new industry is promised in sugar making and refining, systematic experiments producing beets far above the required tests; the great Temescal tin deposits are being negotiated for by English capitalists; and a State commission has selected a site in this county for an insane asylum.

POPULATION—SCHOOL PROPERTY.

The population of the county may be approximately figured by school districts from the school census as 33,000, the census by districts and the total being as follows:

Districts—	Census Children.
Agua Mansa.....	54
Alessandro.....	81
American.....	82
Arlington.....	133
Brooke.....	115
Cajon.....	23
Calico.....	41
Central.....	108
Chino.....	30
City.....	1,030
City Creek.....	64
Colton.....	338
Crafton.....	44
Cram.....	32
Cucamonga.....	63
Daguerre.....	33
Edwanda.....	39
Fairview.....	26
Hermosa.....	18
Highland.....	100
Jamul.....	40
Jurupa.....	54
Lugonia.....	87
Lytle.....	24
Magnolia.....	50
Metcalf.....	98
Mill.....	62
Mission.....	70
Mojave.....	18
Mountain.....	11
Mountain View.....	20
Mount Vernon.....	255
Needles.....	93
New Chino.....	93
Ontario.....	314
Oro Grande.....	45
Paseo.....	32
Pedersen.....	39
Pleasant Valley.....	26
Prospect.....	40
Railroad.....	57
Redlands.....	174
Riley.....	133
Rincon.....	24
Riverside.....	849
Rugby.....	64
San Geronimo.....	94
Santa Ana.....	20
San Antonio.....	55
San Salvador.....	98
San Timoteo.....	22
Summit.....	104
Temescal.....	50
Trujillo.....	63
Valley.....	24
Victor.....	47
Warm Spring.....	65
Washington.....	28
Waterman.....	24
Yorba.....	17
Yucaipa.....	87

Total.....6,139

Total census children, 6033; less San Geronimo, 43—5990.

Some towns have several districts, which should be united to obtain their population.

In the value of her public school property, as compared with the total assessment, San Bernardino county leads all the counties of the State.

CLIMATE.

As to climate, meteorologists and tourists pronounce this one of the most favored spots of a State, whose southern portions have no equal elsewhere in the world. The county's average of perfectly clear days exceeds 300 a year, and the most perfect parts of her most productive valley average but 8.16 inches rainfall per year. The water for

irrigation during the dry season is brought to these districts in canals, which a large force of men are constantly employed to keep clean, and that for domestic purposes being brought in a perfectly pure state in pipes direct from artesian wells.

The climate is never that of extreme cold even among the mountains, and, except upon the desert, never that of extreme heat. No part of the "American Italy" surpasses it for those troubled with rheumatism or pulmonary troubles, the average humidity being far less than that of the coast. Points removed somewhat from the mountains, being dryer even than the foothills, are considered best for these troubles, during the greater part of the year. Nearly all sections, however, have living exponents of the healing nature of the air. Naturally those in the last stages of pulmonary disease seldom recover, and many in the earlier stages who recklessly expose themselves simply because they are in California pay the penalty with their lives. The writer of this article, who came to the State in what was considered the last stage of acute phthisis, became quite vigorous after three years' stay in Colton and Riverside, and has met many from other districts who have experienced the same happy result.

Lands in the raisin and orange district can be purchased at from \$150 to \$400 with perpetual water right.

The principal minerals are gold, silver, tin, lead, iron, borax, marble, gneiss, limestone, etc.

IMPROVEMENTS DURING THE YEAR.

The improvements of the year just closing, carefully estimated from figures collected, are as follows:

2422 acres orange trees planted this year, cost, not including land and water.....	\$375,000
64 acres lemon and lime trees planted.....	6,400
1060 acres planted to other trees and to vines.....	42,000
Water—development of, laying pipe, making canals, tunnels, etc.....	550,000
Buildings—residences, business houses.....	982,000

Total improvements.....\$1,955,400

ACREAGE UNDER CULTIVATION.

The number of acres in this county devoted to agricultural and horticultural purposes is placed at the following figures:

	Acres.
Orange trees.....	11,600
Lemon and lime trees.....	375
Olive trees.....	120
Deciduous fruit trees.....	4,425
English walnuts, almonds, etc.....	105
Strawberries and blackberries.....	95
Haisin grapes.....	43.0
Wine grapes.....	13.0
Barley for grain.....	23,500
Barley for hay.....	5,000
Wheat and on s.....	2,500
Corn.....	9.0
Alfa for hay and pasturage.....	5,000
Miscellaneous.....	5,000

Total.....64,410

This acreage is based on the orchards and vineyards planted up to date, and the crops as planted for the season of 1889.

THE PRINCIPAL CITY.

San Bernardino is the county seat and business center. The city proper is in the form of a square mile, but quite a population is outside the city limits, as also the large depots and warehouses of the Santa Fé road. The Southern California Motor road connects Redlands, Colton, and the Southern Pacific (at Colton) with the county seat. One branch of the Santa Fé also runs south from here. The site for the new State Insane Asylum has been located in the foothills, a few miles south from the city, and passengers bound for the Hot Springs at Arrowhead or Harlem leave the train at this point.

It has a number of commodious hotels, the Stewart being the largest in the county. Its school and church accommodations are ample; it has a Y.M.C.A. hall, horse car lines, a large number of stores, gas and electric lights, two daily papers, an opera-house, a military company, many magnificent business blocks; is the headquarters of mining information; has lately voted bonds for first-class fire pressure and domestic water service, and lies in the artesian belt. The population is about 8000.

OTHER TOWNS.

Colton, at the junction of the two transcontinental railways and a motor line, is an enterprising town whose citizens have recently offered the county a free gift of a block of land and a \$150,000 courthouse if their city be made the county seat.

The Colton Marble and Lime Works have a capacity of more than 300 barrels of lime per day, and furnish for ornamental building purposes a high grade onyx, which, in a recent competition with the best quarries of the Old World and the new, was awarded the great contract for the Academy of Science, San Francisco, in spite of its lid being the highest bid put in. Colton terrace oranges are equal to the best; hotels and churches and banks are a matter of course; it has a \$20,000 school building, electric lights, horse cars, motor, cannery and packing-

house, an assaying establishment, and two wineries. Population from 1500 to 2000.

Riverside.—The city of Riverside produces one-third of all the oranges grown in California, and is as famous for the quality as for the quantity of her fruit. Her "Rip Van Winkle" lemons are also making themselves known as the equal of the best foreign fruit, and will yet be as much sought for as her celebrated "Riverside Washington Navel" oranges. Secretary Holabird of the Southern California Horticultural Society says, that "Riverside may be called the finest illustration of orange gardening in the world."

The Riverside Water Company, composed of stockholders who are themselves the users of the water—each acre of irrigated land carrying two shares of the stock—possesses the most perfect water system in the State. There are, for irrigating purposes, nearly 40 miles of main canals, and between 125 and 150 miles of distributing ditches, carrying an inch of water for every three acres supplied by them. The company also controls a pipe system, which supplies the settlement with pure artesian water for domestic and fire purposes, street sprinkling, etc., and a pressure of 170 or more feet.

The Gage water system has 21 miles of main canal and many miles of pipe, and supplies an inch to five acres on thousands of acres of fine orange land as can be found in the world.

About 6300 acres of land are under cultivation—not all in full bearing. The city includes within her incorporated limits about 56 square miles—her business center being the "mile square"—and the City Clerk reports 235 miles of streets, among which is the now world-famous double-drive between three rows of trees, and miles of orange orchards—Magnolia avenue. She boasts the best public-school building in the State, erected at a cost of \$65,000; has just completed the best opera-house on the Pacific Coast outside of San Francisco; has 12 churches, a public library, an \$18,000 Y.M.C.A. building, and no saloons; one daily paper, one semi-weekly, two weeklies, 12½ miles of street railway, a steam motor connecting with Colton, Redlands and the county seat; ample hotels, gas and electric light, fire company, State militia company, and an average income from the soil of \$200 for every man, woman and child in the settlement. Her raw lands, with perpetual water right, sell for from \$200 to \$400 per acre, on easy terms; and her orchards, according to age and location, from \$1000 to \$3000, the latter figure having been refused in some cases.

In spite of the seemingly high price no better investment could be made, as in a number of cases the groves have netted more than \$1000 per acre, while B. B. Barney's oldest buds netted him \$1500 per acre last year. Raisin grapes net the owners of vineyards, on an average, \$175 per acre. The climate is one of the best for consumptives, the average humidity being 50 per cent. less than that at the coast, and the altitude between 900 and 1000 feet. Her school census aggregates 1115, indicating a population of about 6000.

Ontario, with about 2000 inhabitants, is a most beautiful settlement, 35 miles from the ocean on the Southern Pacific Road. It calls itself the "Model Colony," and deserves the name. It has splendid common schools, a college with \$200,000 endowment, a public library, two weekly papers, two hotels, and a fruit-packing house. Euclid avenue, 200 feet wide and several miles long, is one of the most beautiful drives on the coast, and also has a street-car line its full length, which will soon be run by electricity. It is particularly proud of its thriving young groves of citrus fruits. The Chino motor connects with trains at this point.

Redlands, on a high sloping mesa, some eight miles southeast of San Bernardino, has one of the most beautiful and healthful locations possible; she has been lavish in expenditures for improvement; her young orange groves are unexcelled—which means much after a description of Riverside—she has a good income from raisin-making, and from the drying and canning of deciduous fruits. She is on a branch of the Santa Fé, is connected with the county-seat, Colton and Riverside by motor; has a weekly paper, Y.M.C.A. building, fine school buildings, planing mill, horsecars and electric lights, and about 1000 inhabitants. It forms the principal part of the estimate of the East San Bernardino Valley orange acreage. Lugonia has been united with Redlands, and has a fine winery.

Chino is a young town resulting from the subdivision of 23,000 acres of the great Chino ranch. The greatest energy is being shown in its development. It has a weekly paper; a motor connects it with the Southern Pacific at Ontario; oil has been found, and a lease of portions of it for a term of 99 years has been made to a company which will develop oil and natural gas. Systematic experiments with the sugar-

beet have given results far above the required tests, and a contract is reported to have been made with the American Sugar Company which is to erect a sugar factory and a refinery. This ranch is for sale in small blocks or large; is splendidly adapted to fruits, dairying and general farming.

Crafton and Highlands, some miles apart, are beautiful foothill settlements in the citrus belt, and produce magnificent citrus fruits. Highlands is already furnishing very superior raisins. Crafton's orange acreage is included in the estimate for San Bernardino Valley.

Mound City, on the Southern Pacific, has fine oranges and a 40-roomed hotel, built upon a commanding eminence, from which it takes its name.

Mission ("Old San Bernardino") has long been famous for the extra-fine flavor of its oranges. It has many acres of English walnuts, and near it is the finest winery in the county, with lands and plant worth hundreds of thousands of dollars.

Elizavinda is a promising town on a branch of the Santa Fé, a few miles west from Rialto. The town is two miles north of its station and produces more raisins than any other town in the county excepting Riverside and Redlands.

Cucamonga and North Cucamonga—the latter being the town—produce large quantities, both of raisins and of wine.

Rialto, on the Santa Fé, three and a half miles west of San Bernardino, is a young settlement founded by a company holding nearly 30,000 acres of land adapted to grapes, figs and citrus and deciduous fruits. Its energy may be inferred from the table showing the citrus acreage set last year.

West Riverside is across the Santa Ana from Riverside; has a fine school-house, large peach orchards and thousands of acres of orange lands upon which an irrigation system is being energetically enlarged and perfected. There is a winery at this place.

East Riverside is mostly under the Gage system of irrigation; has hundreds of acres of young orange orchards, and includes Citrus Junction. It will soon have thousands of acres under cultivation, and may yet become a part of Riverside, with which it is closely identified.

South Riverside, reached by a branch of the Santa Fé system, or by a drive down Riverside's—Magnolia avenue, is 17 miles south of the Riverside "mile square." It is a thriving and energetic young settlement; has put out hundreds of acres of citrus orchards and vineyards; has a \$100,000 plant in operation for the production of clay and cement water pipe, tiling and earthenware; furnishes immense quantities of crushed stone for macadamizing, and carloads of honey; has an energetic population of several hundreds, and publishes a weekly paper.

NATURAL SPRINGS.

Seven miles north of San Bernardino, connected with it by stage and telephone, are the Arrowhead Hot Springs. Hot baths of mud and mineral water are given with much the same curative qualities of the celebrated Hot Springs of Arkansas. The management have a hotel with 100 sleeping apartments, with verandas encircling it, and lighted by electricity throughout.

In the foothills five miles from San Bernardino are the Harlem Springs, with baths of hot mineral water or cold mountain water, and presenting the curious spectacle of hot and cold water springs rising within 18 inches of each other.

THE MINES.

The most valuable mines are at Calico, so named because of the diversified color of the hills. It is estimated that the silver bullion shipped during the first two years from this camp was worth \$2,500,000. There are extensive borax mines near by.

"The Needles," the first station in California on the Santa Fé, has a hotel and publishes a paper.

On the Santa Fé Railroad, seven miles from Calico and southeast of the Providence gold mines, is Daggett, at which point quartz mills are located.

Ten miles farther west is Barstow, a junction at which trains bound for various parts of the southern counties separate from those going north.

On the southern branch, 45 miles north of San Bernardino, is Oro Grande, where are extensive marble quarries and lime kilns, with a capacity of 300 barrels of lime per day. There are also large ranches here, as at Victor, five miles nearer San Bernardino, stocked with thousands of beef cattle.

OTHER FACTS.

Hesperia, among the mountains 25 miles north of San Bernardino, is a small station claiming exceptional evenness of temperature.

Other towns are developing, as may be seen by the school census, and the county must eventually become an em-

pire in population and wealth as well as in area.

San Geronimo, Beaumont and Banning are from thirty to forty miles east of Colton, on the Southern Pacific. The scenery is grand, the climate exceptionally healthful, and grains and berries are raised in great quantities. Banning, alone, shipping more than a ton of blackberries per day during much of the season. These places have excellent hotels, and Banning and Beaumont publish weekly papers.

SAN DIEGO COUNTY.

A COMPACT AND CONSERVATIVE STATEMENT OF IT TODAY.

Recovering from the Boom's Debauch—Increased Production—Lands, Water and Irrigation—Railroads—Mines.

SAN DIEGO COUNTY has seen a great improvement in the year 1889. The area of new land brought under cultivation has been nearly double that of the preceding year, which was itself double that of any previous year. A vast amount of land hitherto hidden in brush, so dense that its character could not be seen, as well as large tracts long held for stock range, have been broken up and devoted to the same purpose.

INCREASED PRODUCTION.

The grain crop was more than double what it had ever been before, and a large surplus now remains on hand. The hay crop also added an immense tonnage to the large surplus of the last season. Thousands of acres were also planted in vines and fruit trees of various kinds. A vast change has been noticeable over previous years in the amount of chickens, vegetables and other small stuff that the farmers and fruit-growers are raising in all directions. Where but a few years ago people were trying only to raise something to haul a long way to market to sell for money to buy provisions to haul all the way home again to eat, they are now raising nearly everything they eat, and the shipments from elsewhere of butter, pork, eggs, potatoes and other stuff that can be so well and so cheaply raised at home, have been small in comparison with those of previous years, when every one considered such trifles above his notice.

The fruit crop has also been larger than ever before, though little except raisins have been prepared for export. The raisin crop has been unusually large and fine, and the higher grades have brought the very highest price on the market. The yield of honey, though much less than that of former years, on account of plowing up so much of the best ranges and burning off so much to increase the pasturage upon the hills, has still been considerable, and has brought a large sum of money into the county upon a very slight investment. The wool crop has been very much the same as the honey crop. While it has been steadily falling off for several years, owing to the destruction by settlement of the free ranges, it is still quite large. The shipments from this county are made at so many different points that the gross amount is difficult to ascertain, and they are not yet all made for the year. But fully \$500,000 has been so far received for the products of the year, while produce to the value of as much more remains on hand, principally hay and grain. The county raised this year fully 20 times the amount of corn that it ever did before. This was not because of any thing specially favorable in the season, but because it has been found that from 25 to 40 bushels can be grown on nearly all the uplands of the coast region by good cultivation alone, without irrigation, the same as is done in a large portion of Los Angeles county; while in the mountains, where the rainfall is very great, much larger crops are a certainty. For one who does his own work and has weeks of time in which to do it, 30 bushels of corn to the acre pay very well, especially for those who farm on the New England plan of farming first for a living.

LIVE STOCK.

The county is well stocked with cattle and horses, but is sadly deficient in hogs to consume the great surplus. This is due to the overstocking of three years ago which led of course to a corresponding scarcity, in the usual California style.

POPULATION.

The increase of population has been in about the same ratio as in the year preceding; the whole increase since the breaking of the boom having been more rapid outside the cities and towns than it was before. During the boom

It was almost impossible to get people away from the attractions of the brass band and free lunch. But since that time those who have come to California to buy farms have gone out to look at land instead of squandering their money on wildcat townsites and then going back to tell eastern editors that the whole of Southern California was chopped into 25-foot lots.

AFTER THE SPREE—CONVALESCING.

The liquidation of accounts resulting from the folly of the boom has been going steadily on, and is now nearly completed. A few lame ducks yet remain, but their number is too small to affect the general prosperity. The deposits in the banks have rapidly increased in the last six months, and the banks have been loaning for several months. A large amount of eastern money has been here for months to loan; the rate of interest has fallen 4 or 5 per cent. within the year, and the lender has been bunting the borrower for several months past.

IMPROVEMENTS—RAILROADS.

As in the rest of Southern California, improvement has gone steadily forward this year, as it did during last year. Many of the best buildings in San Diego have been either built or completed during the year, and several miles of cable road, begun scarce four months ago, are now almost ready for operation. The Cuyamaca Railroad, designed to run to a connection with some transcontinental line, was begun this year, and built to the upper end of El Cajon, 25 miles in the interior, and has done a good business ever since the first train started.

MINES.

The mines of the county have been paying better than ever this year. All the old ones are in full operation, and many new ones have been opened. An important event has been the opening and thorough testing of the cement deposits of the Jamul rancho, about 15 miles back of San Diego. An old cistern on this rancho, built at a time when no cement could have been imported to this coast, has long been known, and it is lined with cement that has no equal in any of the imported cements. The pits, from which it was taken, near by, have long been known, but, until this year, no attention has been paid to it. It has now been most thoroughly tested and explored. The deposit runs within 2 per cent. of the proportions of the best Portland cement, and, so far, shows enough to make 500 barrels a day for 21 years. In quick setting and tensile strength, it excels the best Portland cement.

IRRIGATION.

The greatest improvement of the year, however, has been in the awakening of the people on the subject of irrigation. Heretofore what the people of San Diego county should have regarded as their greatest blessing has been their greatest curse. The fact that so much can be raised without irrigation should have taught people that very little water was needed to produce the same immense results that elsewhere require a great deal. Had it not been possible to raise considerable without irrigation, the greater part of the county within 20 miles of the coast would have been uninhabitable instead of supporting, as it has, for years a much larger population than most people imagine the existence of. This should have taught people that they needed less water than many other sections having the same rainfall, and that, though water is more expensive here, it is really cheaper than in other places, because it will go so much further. But instead of teaching them that, it taught them only the watchword, "No irrigation required," which everybody who knows anything reads, "No irrigation possible."

The last year has changed all this. The wonderful results of irrigation in the counties of Los Angeles and San Bernardino have aroused them from their sleep, and a universal cry for water is heard throughout the land. Plenty of water may be had by storage just as soon as the people decide that they want it.

THE GREAT FLUME.

The year has seen the completion of the San Diego flume bringing water from the high mountains of the interior, although this was practically done nearly two years ago. Though San Diego has looked nearly as dry the past year as ever this is no fault of the system, for several hundred inches of water have been running to waste all summer at the head of the pipe, a few miles back of town.

CROWDING THE DESERT'S BORDERS.

The preliminary work on other large systems, especially on the line of the Pamo Company, is now being done and in a short time the immense area of frostless table lands around San Diego, which in the past have given such a wrong impression of San Diego county, will be under water and the desert will again be pushed ahead.

VENTURA COUNTY.

ABUNDANT WATER, GOOD SOIL AND CHEAP LANDS.

Coming to the Fore—Growth and Progress—Crops and Yields—San Buenaventura and Other Towns.

AN account of the general features of Ventura county appears in another part of this publication, but the following details deserve a place.

The county which adjoins Los Angeles on the west is undoubtedly the least known of the five counties which comprise what is generally termed Southern California. This fact can only be ascribed to lack of transportation facilities. In the early days, before the railroad, Ventura was more easily accessible than Los Angeles, but when the railroad came it followed the San Joaquin Valley and left Ventura out in the cold. The coast line, long projected, is now completed through Ventura from the south, but is not yet a through line to San Francisco. As soon as the breach is filled Ventura county may be expected to assume the position which her resources justify her in claiming. Even now, in spite of defective communication with the outside world, Ventura county has made rapid strides during the past 12 months. The advance has been strictly on merit, for the great Southern California boom never did more than graze the edges of Ventura county.

It is indeed evident that a county which contains over 1,000,000 acres of land, about one-half of which is tillable, deep and rich, cannot long be kept in the rear, especially when, in addition to this, is found one of the finest climates in the world, and cheap water transportation for produce.

PHYSICAL FEATURES.

Ventura county presents a great variety of physical features. For a distance of about 13 miles from Point Rincon, southwest, the high hills of the Coast range and of the San Miguelito present their bold bluffs to the ocean. The Santa Ynez and San Rafael Mountains, rising to an elevation of over 4000 feet, 12 miles from the seashore, encircle the rich and charming valleys of the Ojai and the Santa Susana. The San Emideo range of mountains encroaches upon its northwestern borders, while the Conejo and Santa Susana ranges inclose the fertile Conejo and Pleasant valleys in the southeastern portion.

STREAMS.

The county is well watered by numerous rivers, creeks and springs. The Santa Clara, its most important river, rises in the Soledad range of mountains, and flowing about 60 miles through the southern portion of the county, reaches the ocean about five miles southeast of San Buenaventura. Its principal tributaries furnish an unfailing supply of water for all that portion of the county comprised within the original grants of Sespe, Santa Paula, Saticoy and San Francisco ranchos. The Ventura River, rising in the Santa Ynez Mountains, flows through the Ojai Valley, and, with its tributaries, waters large portions of the Ojai, Cañada Larga and Santa Ana ranchos, supplies the city of Ventura with water, and affords excellent water-power.

Santa Clara Valley extends through the country from northeast to southwest, widening to about 20 miles before reaching the ocean, and is one of the finest bodies of land in the State. The entire length of the valley is traversed by the Santa Clara River, a never-failing stream, which flows into the ocean about six miles east of Ventura. The Simi and Los Posas valleys debouch into the Santa Clara Valley from the eastern side of the county; or more properly speaking, they form a portion of it. On the west side of the Santa Clara River the soil has been penetrated to a great depth. That on the eastern side is equally rich and productive, and good artesian water can be obtained from 35 to 140 feet in apparently unlimited quantities. The Ojai Valley is a lovely nook, nestling between ranges of lofty mountains, about 15 miles north of the county seat. It is but a few miles in extent, but is one of Nature's masterpieces. The soil is dark and rich and is dotted with liveoaks, and covered with cozy residences, orchards, fields and vineyards. It has a wide reputation as a health resort, and is visited by many invalids, overworked people and those needing rest and recuperation. The Conejo is a plateau

on the eastern side of the county, elevated about nine hundred feet above the sea level, and several miles in extent. It contains much timber, principally white and live oak, and possesses a balmy and salubrious climate. Its soil is probably better adapted to the production of small grain than of fruit, though the latter has not been fully tested.

GROWTH AND PROGRESS.

The growth of Ventura county is a real, substantial, productive development, as may be seen from the fact that, during the past two years, the increase of country real estate and improvements has been three times as great as that of the cities and towns. Over 100,000 acres are cultivated in various crops, and there are nearly 500,000 fruit trees in the county, comprising oranges, lemons, limes, loquats, figs, olives, apricots, apples, peaches, pears, cherries, prunes, Japanese persimmons, agaves, guavas, almonds, English walnuts and other varieties. The soil and climate of Ventura county appear to be particularly adapted to the apricot, which there reaches great perfection, and is an important crop. The average yield per acre of various crops in the county and the average market price are given as follows:

Crop.	Av. yield.	Av. market price.
Wheat.....	30 bushels.	\$1 00
Barley.....	30 bushels.	50
Corn.....	60 bushels.	50
Hay.....	1½ tons.	8 00
Beans.....	1500 pounds.	2
Trees.....	42

POPULATION.

The estimated population of Ventura county is 8500; estimated value of products over \$2,000,000, which, allowing five persons to a family, would give an income of \$1200 to each family in the county. The county has resources which are sufficient, if properly developed, to support a population of 150,000.

SOIL AND PRODUCTS.

The soil of Ventura county is generally a dark, fine sandy loam, easy of tillage, retentive of moisture, and deep. Not only are all the staples of the north grown in great perfection, but also a long list of products which flourish only in the semi-tropics. Wheat, barley, Indian corn, Lima beans, hay, flax and mustard are the principal crops grown for exportation. Potatoes, oats, castor beans, canary seed, hops, peanuts and red peppers are also raised in considerable quantities for shipment. Barley is the principal crop of the county; next to that corn, and then beans. Santa Clara Valley is the home of the bean, the culture of the Lima bean having been introduced there in 1875, and now hundreds of acres may be seen from a given point. Fruits and honey are also extensively raised.

THE PRINCIPAL TOWN.

San Buenaventura, the county seat, is the most populous town in the county, containing nearly 4000 inhabitants. A mission was established here 100 years ago. The city is located at the mouth of the Ventura River, overlooking the ocean. The streets are at right angles, and from 60 to 80 feet in width. The city is well supplied with groceries, general merchandise, dry goods, drug and jewelry stores, livery stables, hotels, banks and churches. The press is well represented. All the principal streets have recently been nicely graded, and provided with cement and wooden sidewalks. A complete system of sewerage has been established, and gas lights placed on all the principal streets. The Hotel Del Mar is a very handsome building, three stories in height. The Anacapa is another fine hotel. There is a substantial wharf, from which large quantities of produce are shipped. The transportation of oil is an important business. The oil from wells is piped to a large tank, whence it is conveyed to the wharf, run into vessels provided with iron tanks, and carried to various places up and down the coast. Petroleum fuel being cheap at San Buenaventura, there is every encouragement to hope for the ultimate establishment of an important manufacturing center there.

Santa Paula is a thriving young city in the center of the oil territory, situated 16 miles northeast of San Buenaventura, on the Southern Pacific Railway from Los Angeles to Santa Barbara. It was laid out in 1875. The soil surrounding the town is very fertile. There are hotels, a newspaper, churches and good schools. The water system is perfect, with a pressure of 110 feet on the main street. The population is about 1000. Santa Paula is the headquarters of the oil regions of California. A large amount of money is invested in this industry, one company with a capital stock of \$1,000,000 having a daily production of about 1000 barrels. The region is a network of pipe-lines, conveying the oil to Santa Paula, Ventura, Hueneme and Newhall.

Hueneme is the center of the great grain section of the county. It is on

the ocean, at one of the best natural landings between San Francisco and San Diego, being so protected from storms by the natural configuration of the land that vessels are rarely compelled to put to sea on account of dangerous weather. There is a good wharf and warehouses with a capacity of 12,000 tons of grain. Today Hueneme stands at the head of grain-shipping points south of San Francisco. Corn and barley are the principal crops raised in this section. There arrives at Hueneme, on an average, five vessels a week—steamers and sailing vessels. Hueneme has post, express and telegraph offices, hotels, a church, schools and several stores. There is also a Government lighthouse, a two-story brick structure.

Nordhoff is situated in the beautiful Ojai Valley, 15 miles from San Buenaventura, and 900 feet above the sea. It is reached by stages from San Buenaventura and Santa Barbara. The town was named for Charles Nordhoff, the journalist, who visited the valley in 1872 and described it. It is a noted health resort, the climate and scenery being exceptionally fine. There are two hotels, two churches, two school-houses, general merchandise stores and a newspaper.

Saticoy, equidistant between Ventura and Santa Paula, on the railroad, in the midst of the Santa Clara Valley, is surrounded by a most fertile country, and bids fair to become a place of considerable importance. It has a fine church, a town hall and some handsome residences.

Fillmore is a promising little town on the railroad. It is located on the Sespe rancho, which was subdivided several years ago by a Los Angeles company, who have been quietly selling off lands to actual settlers, who are improving their places. Fillmore is already quite a trading point and bids fair to develop into a good-sized town.

[Santa Barbara county is described in a sketch printed in the earlier pages of the ANNUAL TRADE NUMBER.]

ORANGE COUNTY,

FIRST-BORN CHILD OF IMPERIAL LOS ANGELES.

And the Youngest in the Household of California—Extent, Population and Productions—Towns and Villages.

ORANGE COUNTY, the youngest in the State, and the most southerly except one—San Diego county—was brought into existence on the first day of August of the present year. It is composed of what was the southern portion of Los Angeles county. The new county comprises an area of 861 square miles, or about 610,000 acres, 450,000 acres of which is choice agricultural land, and 250,000 have been brought under cultivation. It has a population of 16,000. Its chief products are corn, barley, hay, alfalfa, potatoes, vegetables, all kinds of deciduous and citrus fruits, peanuts, berries and grapes.

NATURAL RESOURCES.

Apart from the productions of the soil, this county possesses other natural resources. Several years since a vein of coal was discovered in the Coast Range of mountains 12 miles east from Santa Ana, which yields a considerable quantity of coal of a fair quality. Oil has been discovered in the low range of hills north from Anaheim. Natural gas has also been developed on the mesa lands adjoining Fairview. The annual resources of this section have been sadly neglected, yet there are abundant indications that there is gold, silver and quicksilver in the mountains east from Santa Ana. Some very rich argentiferous galena has recently been found in the mountains.

HUSBANDRY.

The farming interest, which was considerably neglected throughout the greater portion of Southern California for the past three years, has taken a decided turn for the better. The farmers have come to realize that there is more money to be made by sticking to the farm and cultivating the soil to the best advantage than there is in crazy real estate speculation. Small farms are growing in favor with the farmers and fruit-growers, and it is now generally conceded that five or ten acres, well cultivated to the products they are best adapted to, will yield their owners better results than a much larger amount, farmed after the old-fashioned, slipshod method.

Walnut culture is becoming one of the leading features of horticulture in

Orange county. More walnut trees have been planted out the past season than any other tree, and, as there are thousands of acres in the county that are adapted to growing these nuts, and as there is an unlimited demand for them at remunerative prices, it is likely that this will soon become the banner walnut-producing county of the State. Ten thousand acres were planted to walnut trees this year, and it is estimated that 15,000 acres more will be planted in 1890.

Vegetable-growing is a profitable business, and is carried on extensively in some portions of the county. Large quantities of peas, cabbages and tomatoes are being raised for the eastern winter market, shipped to the large eastern cities and disposed of at remunerative prices.

Dairying is a profitable business, especially in localities where the lands are damp, and large crops of corn, beets, alfalfa, carrots and other milk-producing feed are grown without irrigation. An unusual amount of interest has been manifested in this industry the past year. A creamery was established in the Newport district about four months ago, and is doing a good business; two more will be started in a short time, one at Westminster and another near Garden Grove. The Buena Park Milk Condenser, with a capacity of using the milk from 3000 cows daily, will be in operation within a couple of weeks.

There is perhaps more money made from the poultry business than any other industry in proportion to the money invested. Almost every farmer and fruit-grower in the county is engaged in this business on a limited scale, and in almost every instance derives sufficient money from it to meet his grocery bills; and in some cases enough to buy the clothing for the family. Those who have made a specialty of the business, and have attended to it understandingly, have always succeeded in making money. It is estimated by poultry-raisers that a gross yearly income of \$200 could be realized from \$100 worth of laying stock.

Small fruit-growing is profitable on the warm sandy loam. On this character of soil blackberries, raspberries and strawberries produce abundantly. It is not an unusual occurrence for an acre of blackberries, in this county, to yield three tons of fruit, and in some exceptional cases half a ton more; but the average yield on land suited to their growth is 4000 pounds, which can be marketed for from 6 to 10 cents per pound.

The peanut crop for the county the past season amounted to \$40,000.

THE LAND.

Every character of soil that is found in California can be duplicated in Orange county, and every product that is grown in the semi-tropics can be successfully produced there.

Good unimproved land can be bought for from \$30 to \$60 per acre, while improved land sells for from \$100 to \$200, according to improvements and location.

WATER.

The Santa Ana River, the Santiago Creek and the numerous mountain streams furnish water for irrigating about all the tillable lands of the county that require it, except in the arid belts. In these districts the water from flowing wells is used for irrigation. The total area of land covered by these arid belts is about 50,000 acres, or nearly one-fourth of all the land under cultivation in the county. Flowing wells are obtained at a depth of from 50 to 35 feet, at a cost of from \$100 to \$1000. There is considerable land in the county that does not require irrigation, and will grow large crops of corn, potatoes, alfalfa and vegetables without it, no matter how dry the season. These moist lands are the best in the county for growing apples and pears as well as feed for dairy stock.

WEALTH.

Following are the County Assessor's figures for the new county:

Number of acres.....	420,428
Value of real estate, other than city and town lots.....	\$4,800,706
Value of improvements thereon.....	680,626
Value of city and town lots.....	1,827,169
Value of personal property, exclusive of money and solvent credits.....	1,168,641
Total value after equalization by State board.....	\$8,448,024
Railroad, Santa Fé.....	\$33,931
Railroad, Southern Pacific.....	228,791

RAILROADS.

The Southern Pacific Railroad has a branch line, connecting Santa Ana with Los Angeles; also another line, skirting the foothills from Tustin, and connecting with the main system at the same city. It is evidently the intention of the company to extend this line to San Diego.

The main line of the Santa Fé system traverses the entire length of the county, connecting Santa Ana with both Los Angeles and San Diego. Another line of this same system branches off at Orange and follows the Santa Ana River, connecting with its main

line from San Diego to San Bernardino at Riverside.

MARITIME FACILITIES.

Besides the commercial advantages afforded by these two great railroads, the county is blessed with two ocean outlets—Anaheim Landing and McFadden's Landing. Twelve miles south from Santa Ana, and about a mile from the old wharf at Newport Bay, James McFadden & Co. have constructed a good, substantial pier, which is known as Newport pier. It affords a safe landing for the largest coast vessels. The Pacific Coast Steamship Company's steamers make regular weekly calls, receiving and discharging freight and taking on passengers for San Diego or San Francisco. The builders of this pier are also engaged in building a standard-gauge railroad from the pier to Santa Ana. Several miles of the roadbed is already completed, and it is generally conceded that the road will be pushed to completion as rapidly as possible. This landing is now of great service to the farmers and merchants of the county, as large quantities of merchandise are discharged there and hauled to their destination by teams; also large shipments of grain and other farm products find a way to market through that channel, all of which at present must be hauled to the pier by teams.

THE SUGAR BEET—A CANNERY NEEDED.

It has been demonstrated by actual experiments that sugar beets of excellent quality can be grown in Orange county. There are thousands of acres that are well adapted to growing this product, and the farmers have expressed a willingness to plant a large amount of land to sugar beets if some one with capital will agree to build a factory somewhere in the county for working them up into sugar.

Another necessity of the county is a canning factory. Thousands of pounds of fruit rots under the trees every season for the want of some means of taking care of it, yet our merchants import large amounts of canned goods every month in the year, thus sending out of the country immense sums of money that could be kept at home if we had a home cannery.

The principal towns of the county are:

	Population.
Santa Ana.....	6000
Anaheim.....	1300
Orange.....	1200
Tustin.....	1250
Westminster.....	900
Garden Grove.....	700
Fairview.....	600
El Modena.....	700
McPherson.....	250
Anaheim Landing.....	300

The above figures for the outside towns include considerable of the territory surrounding them; but which is generally considered a portion of the towns proper.

Santa Ana, the County Seat.

Santa Ana, a city of the fifth class, is the county seat, and the commercial center of Orange county. Its population is about 6000. It is located near the center of the county, about twelve miles from the Pacific Ocean, on the main line of the Santa Fé system, and is the terminal point of the Southern Pacific's branch line from Los Angeles. The Fairview Development Company has completed a narrow-gauge road connecting Fairview with Santa Ana, the objective point of the road being an ocean outlet at or near McFadden's Landing. A standard-gauge road is being built from McFadden's Landing to this city. As has been stated, a considerable amount of the roadbed has already been graded, and it is expected that the road will be completed within a few months. The total assessed valuation of city property for 1889 was \$2,561,275.

Owing to the fact that Santa Ana is the trade center of one of the choicest agricultural and horticultural sections in Southern California, her commercial interests suffered but little inconvenience from the collapse of the boom. The city was built up and supported by the resources of the surrounding country. Some good, substantial business blocks and residence buildings have been completed within the past year, and several others are under course of construction. Noticeable among these are:

First National Bank.....	\$35,000
C. E. French's brick block.....	45,000
J. W. Layman's residence.....	20,000
Dr. A. J. Howe's residence.....	8,000
Hawley's residence.....	3,000
C. A. Hunt's residence.....	3,000
George W. Ford's residence.....	5,000
E. S. Hunt's residence.....	3,000
Z. B. West's residence.....	3,000
J. H. Moesser's residence.....	3,000
A. Lee's residence.....	2,500
M. Runhaus's residence.....	5,000
Dr. C. D. Ball's residence.....	3,000
United Presbyterian Church.....	5,000
Advent Church.....	2,500
Episcopal Church.....	5,000

There have been a large number of residences, costing all the way from

\$500 to \$1000, that are not mentioned in the above. It would be safe to estimate the aggregate cost of buildings of all classes for the past twelve months at \$250,000. Almost every line of business is well represented. The merchants carry first-class stocks, and purchasers can be supplied at as reasonable figures as elsewhere in Southern California.

The following are the business houses and businesses now operating in the city: Six dry goods stores, 12 grocery stores, 2 gent's furnishing goods establishments, 6 hardware stores, 5 livery stables, 4 millinery stores, 2 feed and grain stores, 1 steam roller flouring mill, 3 hotels, 3 restaurants, 2 confectioneries, 5 drug stores, 1 bazar, 8 saloons, 5 harness shops, 2 photograph galleries, 2 merchant tailor shops, 4 job printing-houses, 6 newspapers (four weeklies and two dailies), 4 cigar stands, 2 news depots, 1 cigar factory, 1 hair-dressing establishment, 2 stores where musical instruments are sold, 1 paint and oil store, 4 bakeries, 3 shoe shops, 9 real estate offices, 3 dental parlors, 2 packing-houses, 4 butcher shops, 3 clothing stores, 2 gun stores, 2 undertaking parlors, 3 banks, 2 abstract companies, 2 shoe stores, 3 jewelry stores, 1 fruit and seed store, 1 hardware and grocery store, 1 general merchandise store, 6 blacksmith shops, 1 machine shop, 6 lodging-houses, 1 tin store, 1 oil and gasoline store, 2 second-hand furniture stores, 2 sewing machine offices, 1 marble works, 1 employment office, 2 lumber yards, 1 gas works, 1 Thompson & Houston electric light works, 3 carpenter shops, 4 carriage repositories, 3 furniture stores.

THE BANKS.

Some interesting information as to the volume of business transacted and the general prosperity of the county can be gained by examining the statements of the banks of the city given below:

Statement of the First National Bank of Santa Ana at close of business December 16, 1889:

Resources.	
Loans and discounts.....	\$222,880 53
U. S. bonds and premiums.....	43,680 00
Redemption fund.....	1,687 50
Real estate, furniture and fixtures.....	\$3,215 46
Expenses and taxes paid.....	3,083 94
Cash on hand and in other banks.....	83,076 97
Total.....	\$417,571 40

Liabilities.	
Capital paid in.....	\$150,000 00
Surplus.....	7,500 00
Undivided profits.....	12,886 26
Circulation.....	33,750 00
Deposits.....	213,935 14
Total.....	\$417,571 40

The Commercial Bank of Santa Ana has a paid-up capital of \$100,000; surplus, \$40,000; deposits, \$200,000.

The Orange County Savings, Loan and Trust Company of Santa Ana was incorporated April 8, 1889. It commenced business August 1, 1889, with a guaranteed capital of \$100,000.

EXPORTS.

The following are the exports through the Southern Pacific warehouse at Santa Ana for eleven months of the past year, commencing January 1st, and ending November 1st:

	No. pounds.
Oranges.....	790,000
Lemons.....	63,000
Green fruit.....	211,000
Miscellaneous.....	695,000
General merchandise.....	1,939,230
Eggs.....	4,280
Honey.....	3,000
Wine.....	42,000
Grain.....	450,000
Corn.....	321,000
Hides.....	47,500
Lumber.....	168,000
Walnuts.....	3,830
Cabbages.....	279,000
Live stock.....	125,000
Potatoes.....	236,000
Peanuts.....	5,000
Total.....	5,373,080

The exports via Santa Fé are not obtainable, but it is fair to estimate that they will equal those of the Southern Pacific, which would give a total of about 11,000,000 pounds by rail.

The exports via McFadden's Landing over the steamship company's line, as furnished by the Santa Ana office, sums up a total of 1,180,400 pounds, about all of which consisted of corn, barley, peanuts and wool.

Following were the shipments by Wells, Fargo & Co.'s express from the Santa Ana office for the month of November, 1889, of a few of the articles of produce:

	Pounds.
Eggs.....	3470
Poultry (live).....	9763
Fish.....	8580
Game.....	540
Butter.....	1400
Miscellaneous shipments of merchandise are not included.	

Santa Ana is a city of churches and schools. Almost every religious denomination is represented, and about all own their own buildings. The following are the names of the denominations: United Presbyterian, Presbyterian, Baptist, M. E. South, Methodist

Episcopal, Christian, Advents, German Lutheran, Episcopal, Congregationalist and Catholic. The city has three large public school buildings, with an attendance of 800 pupils and a corps of 14 teachers. Besides the public schools, there are two private schools, with a good attendance; also a public library, well stocked.

LIGHTS—STREET CARS.

The city is lighted by electricity and gas. A movement is on foot to put in a telephone exchange. There is a street-car system of about six miles. The same system also connects the city with Orange and Tustin. The Orange and Santa Ana line connects with the Orange and El Modena system, thus giving Santa Ana a continuous line of about 12 miles of street railroad.

DOCTORS—SECRET SOCIETIES.

The medical profession is represented by 14 active practitioners, including specialists. The Orange County Medical Association was organized in Santa Ana immediately following county division. Its members are enthusiastic, and its regular monthly meetings are well attended.

The secret organizations are represented by the Masons, I.O.O.F. (three branches, subordinate, encampment and Rebece), Knights of Pythias, A.O.U.W., Ancient Order of Red Men, Good Templars, G.A.R. Post, and a lodge of the Eastern Star.

On the 9th of December, Company F, N.G.C., was organized with an enrollment of 110 members.

ORANGE.

This is a wideawake town, located in one of the finest orange belts in the county, about three miles northeast of Santa Ana, on the Santa Fé's main line, and is the junction of the California Central and the California Southern. A plaza, with neatly-kept walks, lined with flowers and a playing fountain in the center, is one of the attractions of the town. Her citizens are energetic, progressive and cultured, and possess the essential elements necessary to make their place one of the leading towns of the county. The town has a number of substantial brick blocks and its suburbs some of the finest residences and fruit farms in the county.

The Hotel Rochester, a large brick building, completed about eighteen months ago at a cost of \$65,000, has recently been converted into a college building, in which the Orange County College is now being conducted, under the management of Prof. Harwood, assisted by an able corps of teachers.

The town is incorporated, and an ordinance is in existence prohibiting saloons inside the corporate limits. The religious denominations are represented by the Methodists, Presbyterians, Christians, Baptists and German Lutherans. It has two weekly newspapers and two job offices, also a public library well supplied with books, papers and periodicals. It has a bank doing a prosperous business, one hardware store, one tinshop, one drygoods store, two general merchandise stores, one shoe shop, three drug stores, three blacksmith shops, two fruit-packing establishments, two livery stables, two barber shops, one confectionery, one bakery, two real estate offices, two hotels, two jewelry stores, one furniture store and one book store.

The fruit-growers and farmers raise all kinds of citrus and deciduous fruits and a general variety of farm products. There are also some very profitable walnut groves in that section, and a large number of English walnut trees were planted the past season. Small farms are numerous, it being a rare occurrence to find a farmer or fruit-grower owning more than 20 acres. Good land can be purchased at prices ranging from \$50 to \$200 per acre.

ANAHEIM.

The mother colony has not been behind her sisters in the matter of progress during the past year. Many substantial improvements were made. Notwithstanding the past year has been the dullest in business and real estate transactions known for years in Southern California, yet this sterling town has shown more real progress than during any other year in her history, as is evidenced by the following facts and figures. The most important buildings finished or commenced since last January are: Conrad's two-story brick export brewery, cost \$12,000; St. Catharine's Academy, three-story brick, cost \$20,000; Federman's two-story brick block, cost \$8000; Mrs. M. S. Metz' two-story brick block, \$7000; Federman's one-story brick block, \$4000. Fred Crist, S. A. Dennis, T. J. F. Boege, V. Blanchard, Frank E. M. S. Metz, Theo. Flotow, R. Menzel and I. Hall have built frame business houses; aggregate cost, \$6000. West Anaheim schoolhouse, cost \$7000; Methodist Church, cost \$4000; Thacker Bros' packing-house, cost \$1200; Dr. Ballard, H. Cohn, H. Cheynoworth, H. C. Kellogg, F. Crist, A. Langenberger, Blanchard F. Gates, J. Houn-

som, L. Desmond, R. A. Blair and 12 other residences of various costs, aggregating \$30,000.

Anaheim has a street-car line one and a half miles long that has been in successful operation during the past two years, a bank with over \$100,000 regular deposits, a good opera-house that cost \$16,000. The town is lighted by gas, has extensive water works; has recently organized a Wright irrigating district, with bonds of \$500,000; has a splendid company of State militia of 60 members, including a good military band; seven churches, seven secret societies, G. A. R. Post, Women's Relief Corps, Ladies' Industrial Society and Young Ladies' Aid Society. There are 80 business houses in the city, representing about every branch of trade, all doing a good business. The town has a commodious new postoffice, express office, telegraph and telephone offices, one weekly and one semi-weekly newspaper, a brewery, candy factory, brick and lumber-yard, a packing-house for hams and bacon, a sausage factory, two planing and turning mills, two grist mills and two bakeries.

The professions are well represented. The Anaheim public schools are among the best in the county, and comprise a \$20,000 brick Sisters' College, a \$12,000 frame school building, and another costing \$7,000. The schools employ 10 teachers and accommodate 400 pupils.

Both the Santa Fé and the Southern Pacific roads run through town, and have commodious depots. The average monthly shipments of merchandise and produce are about 2,000,000 pounds. Anaheim last season shipped 100 carloads of oranges, and this season will ship about 150 carloads, which will realize the fruit-growers from \$75,000 to \$100,000.

Other products are hay, grain, potatoes and all kinds of fruit, petroleum, brea, honey, wool, wine and brandy, walnuts, corn and dried fruit, fresh and cured meats, poultry, butter and eggs, nursery stock, cattle and hogs, pampas plumes and ostrich plumes and coopersage. These go to swell the freight tonnage, and add wealth to the town and surrounding country.

Anaheim is incorporated and has a popular and progressive set of officers. The city has a fine system of sidewalks, neat, well-kept and well-lighted streets, and good water works.

The population is steadily increasing with a good class of settlers. The outlook for improvements for the coming year is flattering and will no doubt surpass the last.

WESTMINSTER.

The town of Westminster is in the center of the colony of that name. It has a population of about 450. The business houses consist of two general merchandise and grocery stores, two blacksmith and wagon-makers' shops, one drug store, one saloon, one hotel and one feed yard. There are three churches. The town has a lodge of I. O. O. F., a branch of the W. C. T. U. and a good school building. The public school is well attended and requires the services of two teachers.

The colony was one among the first planted in the southern portion of Los Angeles county, now Orange county. The soil is very productive; a large portion of the land will grow large crops without irrigation. Besides the advantages of damp soil, it is in the artesian belt. Water for irrigation can be had for domestic and irrigation purposes at a depth of from 50 to 200 feet. It is thickly populated, the land being owned by small holders. The celebrated peat lands are in the southern portion of the colony. The productive qualities of this land are almost fabulous. The farmers think nothing of raising 125 bushels of corn per acre, and other products in proportion. The chief products are corn, beets, pumpkins, potatoes, sorghum, alfalfa, vegetables, deciduous fruits; and on the higher lands of the colony some fine oranges are grown. Dairying and stock-raising are also profitable businesses, and are engaged in quite extensively.

GARDEN GROVE

is a town of about 350 inhabitants, and is the trade center of a splendid agricultural district, lying four miles west from Santa Ana. It has 1 dry goods and general merchandise store, 1 grocery store, 1 blacksmith shop, 1 hotel, 1 shoe shop, a good church building, a good schoolhouse, a post-office and two daily mails. The country around Garden Grove has made greater advancement in the way of residence building within the past year than any other settlement in the county. There has also been more new land brought under cultivation than in any other part of the county. The farmers raise corn, barley, deciduous and citrus fruits, vegetables, grapes and English walnuts. Dairying, stock-raising and the poultry business are also carried on profitably.

TUSTIN

is a thriving little town three miles southeast from Santa Ana; population,

1100. It has a bank, dry goods stores, grocery stores, blacksmith shops, livery stables; in fact, the different branches of business are well represented. It has a larger number of neat cottages and handsome residences than any other town of its size in the county. The terminus of the Southern Pacific Railroad's foothill line is at that place. The principal products of the country around Tustin are oranges, lemons, walnuts, peanuts, corn, barley, alfalfa and deciduous fruits. The Tustin and Santa Ana street-car line connects Tustin with Santa Ana. The orange crop for 1889 is estimated at 150 carloads.

EL MODENA

is a town of 750 inhabitants, built on the mesa lands near the foothills, about four miles northeast of Santa Ana. The people of El Modena are principally Quakers. Fruit and vegetables are the chief products of the country in that vicinity. The Southern Pacific foothill line has a depot near the town.

M'PIERSON

is a small town about one-half mile west of El Modena. It has a store, postoffice, pickling establishment and a cluster of residence houses; is on the railroad, and the Orange and El Modena street-car line runs through the town.

NEWPORT PIER.

The wharf at Newport Beach, near Newport Harbor, about 10 miles from Santa Ana, is an "outside" wharf, 1200 feet in length, with 22 feet of water at extreme low tide, that being sufficient to accommodate all coast vessels. The wharf has now been completed over a year. It is the most substantial structure of the kind on the southern coast. The steamers of the Pacific Coast Steamship Company have been calling there regularly ever since the wharf was finished, and have never missed a trip or been delayed on account of rough weather. The greater part of the traffic between the Santa Ana Valley and San Francisco is shipped over this wharf. A railroad will undoubtedly be built between Santa Ana and the wharf in the near future, the most expensive part of the grading on the road being already completed. The wharf and line are owned by the Newport Wharf and Lumber Company, which is doing a large lumber business over the wharf.

The beach near the wharf, known as Newport Beach, is unsurpassed as a bathing resort on the Pacific Coast. Last summer, during the bathing season, from 500 to 1000 persons were camped on this beach.

FULLERTON

is a thrifty young town on the Santa Fé, about three miles north of Anaheim; is located in the center of one of the finest agricultural districts in the county. The entire business portion of the town is built up of good substantial brick buildings, giving the place a "come-to-stay" air that greatly contrasts with many of the boom towns of the State. It has a weekly newspaper, a bank, several stores, blacksmith shops, and a number of other business houses, all doing a good business. The soil in the immediate vicinity of the town is first-class. The farmers grow immense crops of corn, potatoes, barley, beets, pumpkins, vegetables, and, in fact, all kinds of general farm products, as well as choice oranges, lemons, apples, pears, apricots, berries and English walnuts.

FAIRVIEW.

The town of Fairview is located on the high mesa lands between Santa Ana and Newport Landing, several miles south of Santa Ana. It is built upon one of the most beautiful natural sites of any town in the county, commanding a magnificent view of the surrounding country. The town was laid out about the time the boom subsided, and has been steadily pushing forward, notwithstanding the general depression experienced throughout the country. It has a good hotel, which cost \$12,000, a number of fine store buildings and numerous neat cottages and handsome residences which would do credit to a town of much larger size. There are but few inferior buildings in the town. The residences range in cost from \$1000 to \$15,000 each.

The water supply for domestic purposes for the town, as well as that used for irrigating the land in that vicinity, is supplied from artesian wells. These wells flow a large volume of water, and the water from some of them is very warm and highly impregnated with mineral, which is said to possess valuable medicinal qualities. The water has a temperature of 90°, and is utilized for bathing purposes. One or two of these wells emit a considerable quantity of combustible gas, which has been utilized to a limited extent as fuel. As was previously stated, the Fairview Company has constructed a narrow-gauge road connecting that town with Santa Ana, and it is its intention to extend it to

either Newport pier or the bay, a distance of four miles.

CAPISTRANO.

Capistrano, or San Juan Capistrano, as it was formerly called, is one of the oldest towns on the coast. Its chief interest in the past has been the old mission that was established there more than a century ago by the Jesuit missionaries of the Roman Catholic Church. The old mission is now a pile of ruins. The Cathedral, which was a large massive structure of stone, was partially destroyed by an earthquake in 1812. The portion that remained standing was repaired and has been used by the old padres and their flocks as a place for holding religious worship, up to the present time. Hundreds of tourists and lovers of antiquity visit these old ruins every year. The poet has made it the burden of his song, and the historian his theme.

But the old mission is not the only thing of interest in this locality. Capistrano is situated in one of the most fertile valleys on the Pacific Coast. It is 20 miles south of Santa Ana, on the main line of the Santa Fé, about two miles from the Pacific Ocean, and is the trade center of a large scope of country. Capistrano Valley possesses some of the finest walnut groves in the State. Abundant crops of corn, potatoes, pumpkins, vegetables, deciduous and citrus fruits are grown by the farmers and fruit-growers. That section is especially adapted to the English walnut, oranges and lemons. The scalebug has never troubled the oranges. Besides the agricultural and horticultural interests of the valley, the foothills and mountains surrounding the valley possess considerable merit as a stock country. Large herds of sheep, horses and cattle roam the hills, and are a source of profit to their owners. There are also numerous bee ranches in the cañons, and a large amount of white sage honey—the best on the market—is shipped by the apiarists from that locality.

The following are some of the shipments from Capistrano Station the past season:

Beef cattle, head.....	1,500
Mutton sheep, head.....	1,000
Wool, lbs.....	185,000
English walnuts, lbs.....	178,250
Honey, lbs.....	40,000
Miscellaneous, lbs.....	100,000

The Mexican population, of which the town and county was almost entirely composed, to within a year or two ago, is rapidly giving way to an energetic and more enterprising class of people.

IN THE SAN FERNANDO.

THE BIG VALLEY, ITS TOWNS AND TRIBUTARIES.

Location and General Features—Tropico, Glendale, Burbank and San Fernando—Brief Mention of Each.

In the San Fernando Valley the village of Tropico, situated six miles north of Los Angeles, is the first station on the Southern Pacific Railroad north of this city. The Glendale narrow-gauge road also runs through this flourishing settlement, the two roads affording unusually good facilities for communication with Los Angeles and the rest of the world. This advantage is attracting the notice of business men who prefer to live in a suburban town, while doing business in the city, and Tropico has no vacant houses as a consequence. The lower lands aligning the Los Angeles River here are moist and very fertile, requiring no irrigation to produce good crops of staple farm products.

Potatoes by the carload have been raised and shipped from here during the past season, apparently as fine in quality as the northern product. Chinamen are the principal farmers of this land at present. A great many acres belonging to W. C. B. Richardson are devoted to dairy purposes. Land of this description can be bought at from \$100 to \$150 per acre. The principal part of the settlement, however, is about 100 feet higher and a mile distant from the river. Here is a collection of small farms and homes, attractive in appearance and belonging, as a rule, to intelligent and progressive people. The soil is adapted to small fruits; vegetables and deciduous fruits especially, and citrus fruits will do well in many localities, although there are no large orange orchards here as yet. In the choicest locations land here is worth \$300 to \$500 per acre, unimproved. Such land has a water right in the Verdugo Cañon water, ample even for orange culture, while wells from 60 to 100 feet deep are common, windmills being used for pumping. Seven or

eight dwelling houses have been erected here during the past year, all of which are occupied. There are no saloons in the settlement. A parsonage has recently been built near the Methodist Church on Glendale avenue. There has probably been an increase of 20 per cent. in the population of Tropico in the past year, as compared with the previous year. The public school here has two teachers, with an average attendance of about 80 scholars. Tropico is in the Sepulveda school district with Glendale, and votes in the Glendale precinct.

GLENDALE.

This place joins Tropico on the north, their respective postoffices being about two miles apart. It is six miles distant from the depot of the Glendale narrow-gauge railroad at Downey-avenue bridge, Los Angeles. This road runs five trains each way daily, and gives residents of Glendale excellent facilities for traveling between their homes and the city, where a number of them are engaged in business. Tropico depot, on the Southern Pacific, is also only two miles distant, and is its shipping point. The soil here is lighter than at Tropico, being in some places quite sandy, but is well adapted to the culture of citrus and small fruits. Within the town site, only one or two houses have been erected in the past year, but others that were vacant a year ago are occupied, while within a radius of a mile from the postoffice (called "Mason") half a dozen dwellings have been erected in the past 12 months. At Glendale are the magnificent orange orchards of H. J. Crow, Capt. Thom and Judge Ross. From the latter orchard last year about 11,000 boxes of oranges were shipped at Tropico station by the Earl Fruit Company. The crop from the same orchard this year has been sold, it is said, at \$2 per box, which will net the fortunate owner more than last year's crop, although the yield is not so great as then. Several hundred orange trees will be set out in this vicinity during the present season. After oranges, peaches are the favorite fruit in this locality, many of the farmers selling direct to the consumer, and realizing from \$1 to \$2 per tree for this fruit, which is unexcelled in quality, as it is grown without irrigation.

Under pressure of hard times one or two small lots of unimproved land have been sold here recently for \$150 per acre, but prices in general rule much higher. Nearly all this land is entitled to water from Verdugo Cañon, where during the driest part of summer a stream of 200 inches flows, with great possibilities of developing a much greater quantity. In the public school here two teachers are employed, the average attendance of scholars being about eighty or ninety. The Glendale Seminary—"St. Hilda's Hall"—Dr. Easter, principal, is located here. The building was originally built for a hotel, but makes an admirable school building. The school has at present about thirty-five scholars, and is an excellent institution.

On the eastern boundary Glendale merges into Verdugo—practically the same settlement. In the Sepulveda school district, comprising Glendale, Tropico and Verdugo, there was an increase of 44 children between the ages of 12 and 17 from June, 1888, to June, 1889, showing a growth not equaled in many other districts of the county in the same time.

BURBANK

is on the Southern Pacific Railroad, 10 miles from Los Angeles. This place is also the present terminus of the Los Angeles and Pacific road. The growth of Burbank was so remarkable at the beginning that the fact of its holding its own in regard to population is in itself encouraging. Although the town has not grown any within the past year, there has been a constant development of the country adjacent. On the Lankershim ranch, just west of Burbank, a few buildings have been erected, orchards and vineyards set out, etc.

The Burbank Furniture Factory, a complete establishment in all the details of the business, has been running almost constantly during the past year. The Villa Hotel is a handsome, well-furnished establishment, admirably adapted to supply the demands of tourists and families. There is also another hotel here, less ambitious but not less useful on that account. The public school building is a fine two-story structure. Only one teacher is employed at present. A five-mile cement ditch has been completed during the past year. This ditch brings water from the Los Angeles River, and furnishes sufficient to irrigate a large body of land. Land under the ditch can be bought for about \$100 per acre, much of it excellent in quality. Land along the base of the mountains is well adapted to the culture of citrus fruits, but as yet there has scarcely been enough water developed here for that purpose. All varieties of deciduous

fruits which flourish in Southern California do well here.

The town is supplied with pure water from two or three small mountain streams, and has a fine cement reservoir and a very complete water system.

SAN FERNANDO

is a promising town at the head of San Fernando Valley, 21 miles from Los Angeles. The new town is about three miles from the old mission of San Fernando, and is on the Southern Pacific Railroad. It consists of a number of substantial business houses and residences, including two public school buildings, a large hotel, and the Theological College connected with the University of Southern California. San Fernando has not grown materially in regard to population in the last year, but more orchards and vineyards are being planted, and a larger acreage of grain sowed in this locality than ever before. The 40,000 acres in wheat last year will probably be increased to 50,000 the present season, with 10,000 acres of barley. San Fernando is an important shipping point for grain, honey and oranges, the latter crop increasing rapidly year by year. In the neighborhood of this settlement are about 170 acres of orange trees, and more will probably be set out this season than ever before. The crop from a 10-acre orchard of young orange trees here has been sold already this year for \$2700.

Milton Thomas, the well-known Los Angeles nurseryman, is preparing to set out 100 acres of land in apple and walnut trees. First-class orange land, with an abundant water supply from Pacoima Cañon, can be procured here for \$150 per acre. Other lands, not having the same water right, but with water within 20 or 40 feet of the surface, can be bought for \$100 per acre.

The best of the orange land with the water right is offered for sale in small lots at very reasonable terms. The great grain ranches are still undivided.

EAGLE ROCK VALLEY.

A Fertile Spot at the Base of the Protecting Sierra.

Formerly a part of the ranch San Rafael, this valley is located some six miles from the Plaza in Los Angeles, following a direct line a trifle east of north, and about four miles west from Pasadena. It includes some 1300 acres of land, probably four-fifths of which may be called tillable, the rest being hill land.

The nearest railway communications are Glendale and Garvanza, either being about one mile and a half distant from the central portion of the valley.

The population may be approximately stated at 110. Farming is as yet the only industry which has been introduced, the first settlement dating back only six years.

The principal shipments the past year were tomatoes, apricots, blackberries and raspberries, interspersed with corn, potatoes, melons, barley, etc.

Among the attractions are those of school, church and good society privileges. The climate also is good, with sufficient ocean breeze during summer.

Good land can be purchased for from \$200 to \$500 per acre, according to soil and improvements, the location as yet having little influence among new settlers.

Water is abundantly developed, either by sinking wells or tunneling into the hills, for all purposes for which it is required.

Small farms of 10 or 12 acres are becoming more numerous each year, while there are still openings for others who do not wish an extensive amount of land. The soil, taking the valley as a whole, seems to be well adapted to fruit of nearly all kinds, while corn and vegetables do exceedingly well. Whatever progress or advancement is being made seems to be of a substantial character, and well adapted to future needs. Whenever the valley possesses better railway facilities, an impetus will doubtless be given that will be to the benefit of settlers, as well as travel.

CAHUENGA VALLEY.

A Favored Suburb, Possessing Exceptional Advantages.

The Cahuenga district stretches from the city border westerly toward the ocean, and comprises an area of about 80 square miles. It is devoted to agriculture, horticulture, dairying and stock-raising. Its proximity to Los Angeles gives it an advantage over remote parts of the county in marketing its products, particularly those of the dairy and the garden, which are usually brought to town in market wagons, though the Los Angeles County Railroad and the Cahuenga Valley road have afforded facilities in this regard which have been available for a portion of the population. Santa Monica, to the west, and the National Soldiers'

Home draw a portion of their supplies from this direction, also. The variety of products of this region is phenomenal. The total absence of frost along the foothills and the trade winds of summer are favorable to the growth of tropical, semi-tropical and temperate-zone fruits and vegetables, as well as corn, barley and other grains.

This immediate locality is remarkable for the production in midwinter of tomatoes, green peas, string beans, green peppers, summer squashes, cucumbers, green corn and other vegetables of like character, which are cultivated in the open field. This year a very large acreage is planted to these products, with a view to supplying the San Francisco and eastern markets. Their production heretofore has been attended with great success, last year

W. H. Carlin clearing over \$2000 from four acres of tomatoes.

The population of this section of the county is less than it would be but for a number of large land-holdings, the result of early Spanish and Mexican grants; but Cahuenga numbers probably over 2000 souls, nearly all of whom depend upon the soil in some manner for subsistence. There is but little trade except in farm products, and as little manufacturing. The brea, or asphaltum, product in former years, and before the artificial stone age, was very large, much of that commodity being shipped by way of the port of Santa Monica to San Francisco and other places. Boring for oil and natural gas has been prosecuted in three or four places in the district, but not to any very considerable depth, although in no case with-

SOUTHERN CALIFORNIA MISSIONS,



THE SAN GABRIEL MISSION



Mission San Luis Rey - Ruined Court



Mission San Juan Capistrano



Red Tower San Juan Capistrano Mission

out favorable results. The asphaltum deposits are quite extensive and are found in various parts of the valley and along the foothills. It serves the purpose of fuel for domestic and other purposes.

An increase of about 20 per cent. in the population has occurred during the past year, and about a like proportion of private buildings; but the increase of cultivated lands, of orchards and vineyards, has not been in equal proportion, though by no means inconsiderable. The supply of excellent water for all parts of the district is more than sufficient, since none is required for irrigation. There is still uncultivated land in this district, and room for many more farmers, horticulturists and dairymen. The price of land ranges from \$100 or less per acre to a thousand dollars. There are two postoffices in the district; one at Colegrove and one at Prospect Park, and no lack of churches and schoolhouses. The new school building, just completed, at Edgmont is one of the finest in the State.

THE NIETOS COUNTRY.

DOWNEY, THE CENTER OF THIS FERTILE REGION.

Resources, Industries and Successes

—What the Cultivators Have Achieved—Los Nietos and Rivera.

DOWNEY is a town of 550 population, situated about 12 miles southeast of Los Angeles, on the Los Angeles and Santa Ana branch of the Southern Pacific Railroad, in the center of the Los Nietos Valley, about half way between Old and New San Gabriel rivers. The town made but little progress, even during the boom, yet the country round about it forged ahead in a most satisfactory manner. The agricultural and horticultural resources were being developed and the farmers and fruit-growers were growing rich from the product of the soil, while many of their more ambitious neighbors were neglecting their farms and engaging in real estate speculations. Downey, being the natural trade center of this rich and prosperous locality, could not remain at a standstill, and something akin to a boom struck the quiet town about the first of the past year. Old framed buildings were torn down, and good, substantial brick erected on their sites. Cement sidewalks have been put down, and a great many essential improvements made.

The merchants of Downey appear to be doing a prosperous business, and it would be safe to say that there are but few towns in the State that have a more substantial backing than this. There are about 50 firms doing business in the town, representing about all of the leading businesses.

The Los Angeles County Agricultural Fair is located here, and has done much to bring about the development of the resources of this wonderfully-productive valley.

The town has a bank doing a good business, a weekly paper, reading-room, five churches, good public-school buildings, conducted by able teachers, and an enrollment of 400 pupils; a lodge of Odd Fellows, that own their hall; also a lodge of Masons, A.O. U.W. and Chosen Friends.

Besides the improvements in the business portions, a large number of handsome cottages and costly residences have been built in the town and suburbs.

The principal products of the valley are corn, livestock, alfalfa, walnuts, pumpkins, grapes, oranges, lemons, apples, pears, poultry, butter and eggs.

The valley has a first-class irrigation system and an abundance of water, no matter how dry the season. The water for this purpose is obtained from Old and New San Gabriel rivers. The Los Nietos Valley has justly earned the reputation of being the banner walnut-producing section of the State, and, according to reliable statistics, exports about three-fourths of all the walnuts of the State.

This valley can furnish a larger number of examples of men who have commenced at the bottom round and have obtained a competency in tilling the soil by exercising economy and a moderate amount of industry than any other locality of like size in the State.

The land of the valley is owned in small farms, ranging from 5 to 80 acres each, which are held at prices of from \$100 to \$1000 per acre, according to improvements and location.

The following were some of the principal shipments of produce from the Downey depot during the past year: Twenty-five carloads of oranges, 500-

600 gallons of wine, 3000 tons of corn. The ticket sales from that station for 1889 will aggregate \$2000 per month.

LOS NIETOS.

Los Nietos is a small town near the junction of the Santa Fé's main line and the Whittier branch of the Southern Pacific Railway. Many years ago this was the trade center of the whole valley. It is the place from which Los Nietos Valley derived its name. The town has stores, blacksmith shops, good public school buildings, churches, a number of good residence buildings, and is surrounded by a rich agricultural country. It has made considerable advance within the past 12 months and if it can manage to hold the trade of the country surrounding it will develop into a town of considerable importance. The land is owned by small holders, who raise corn, vegetables, walnuts, deciduous fruits and berries. The farmers and fruit-growers are out of debt, and are growing rich from the products of the soil. Land is held at from \$100 to \$500 per acre, improved and water-stocked, while unimproved land can be had for from \$30 to \$60. Los Nietos is in the northeastern portion of the valley, about thirteen miles from Los Angeles and three miles from Whittier.

RIVERA.

Rivera is a new town, located in the northern portion of the famous Los Nietos Valley, in what is generally known as the Rancho country. It is on the main line of the Santa Fé system, ten miles southeast of Los Angeles, and three miles north of Downey. It is situated in one of the richest localities in the State, being in the famous English-walnut belt of the Los Nietos Valley. The town was not laid out until the boom had subsided, but, being so favorably located and the natural trade center of a large portion of this rich valley, it has made a wonderful, rapid growth. As one would naturally suppose, the merchants of the town are doing a good business. Quite a number of good business houses and residences have recently been finished. Conspicuous among these improvements is the fine, new hotel which has just been thrown open to the public and is receiving a liberal patronage.

The walnut-growers of the valley have formed themselves into an organization known as the Los Nietos and Rancho Walnut-growers' Association, with headquarters at Riverside. The association contracted its entire crop last spring, which it delivered at Rivera in November, amounting to 27 carloads, receiving for the same \$32,000. The growers not belonging to the association shipped six carloads, for \$12,400, making a total of 33 carloads, and the neat sum of \$45,000. The orange crop of 1889 brought \$35,000; corn, wine and other farm products brought \$25,000, footing up the handsome sum of \$105,000 for products raised within four miles of Rivera since January 1, 1889. Besides the produce above mentioned, large amounts of hay, grain, butter, eggs and poultry have been disposed of, adding wealth to these fortunate farmers and fruit-growers.

A large acreage of the valley was planted to walnuts and oranges last season; neat cottages, surrounded by handsomely laid out grounds, are the rule, and indications of thrift and general prosperity are apparent throughout the whole valley.

NORWALK.

A Milk and Cheese, Corn and Alfalfa Country.

Norwalk is located on the Los Angeles and Santa Ana branch line of the Southern Pacific, 10 miles southeast of Los Angeles. It is a town of 500 inhabitants, the center of a large dairy country, and some of the finest cheese of the State is manufactured there. The mercantile business is represented by three general merchandise stores. There are several blacksmith shops, hotels and saloons, a drug store, hardware store, lumber yard, livery stables and a number of other business houses, all of which appear to be doing a good business.

The principal exports are corn, wine, livestock, cheese, butter, eggs and poultry.

The Eagle cheese factory, which is located here, furnishes the following statement of its business for November, 1889:

Milk used, pounds.....122,249
Cheese manufactured, pounds.....14,158 1/2
Money realized.....\$1,643.17

The milk paid the dairymen at the rate of \$1 per cwt.

The country round about Norwalk is very productive, being especially adapted to alfalfa, corn, beets and deciduous fruits.

Land improved and watered-stocked sells at from \$100 to \$200 per acre. Unimproved land can be had for \$60 per acre. The land is generally owned in small tracts of from 20 to 60 acres each. The country adjacent to Norwalk is

improving more rapidly than the town, a large amount of new land having been brought under cultivation during the past 12 months. Many neat cottages and handsome residences have been erected. The celebrated artesian country is tributary to Norwalk; in fact, is properly one and the same locality. Both places have good school buildings and first-class schools, and the people are as a rule prosperous, progressive and happy.

SAN PEDRO.

THE PORT TOWN OF LOS ANGELES CITY AND COUNTY.

An Extensive Commerce Carried on—The Figures of Exports and Imports—Large Creosoting Works.

AT San Pedro is located the largest creosoting works on the Pacific Coast, if not the largest in the United States. They were constructed during the past year at a cost of \$65,000. They are run day and night and Sundays, and are used by the Southern Pacific Railroad Company in creosoting timbers that are to be exposed to the action of salt water.

There have been erected here during the year 53 new residences, at a cost of about \$60,000; one church edifice (Catholic) at a cost of \$2800.

As a watering-place San Pedro has, during the past year, attracted greater attention than formerly, the variety of beach and facilities for boating being a prominent feature. Inside the breakwater the almost perfectly still water affords a delightful haven for the delicate and timid, while just on the outside (within speaking distance) the vigorous and daring may do battle with old Neptune to their heart's content.

As a health resort it has of late received very marked recognition. The high hills immediately to the westward break the force of the west winds and act as a divider to the huge fields of fog that they carry with them, one-half passing off on the ocean to the southward and the other driving off into the interior, while at San Pedro the sun is wearing his prettiest smile.

But it is as a seaport that San Pedro acquires her chief importance. Located near the western headlands of San Pedro Bay, where the Southern Pacific Railroad terminates in wharves and docks for the union of ship and rail, her exhibit is in a large degree an index of the material prosperity of Southern California.

The following is a summary of export and import business transacted during the year up to December 24th, as shown by the books of the custom-house and the Southern Pacific Railroad Company:

Commerce of the Port of San Pedro in 1889.

SHIPMENTS.	July, Aug. Sept. Oct. Nov. Tot'l				
	1888	1889	1888	1889	1888
Shakes.....	10	12	60,000	10	32
Alphatum, tons.....	10	12	60,000	10	32
Lumber.....	10	12	60,000	10	32
Coal, tons.....	10	12	60,000	10	32
Coke, tons.....	10	12	60,000	10	32
Hops, number.....	10	12	60,000	10	32
Cattle, number.....	10	12	60,000	10	32
Sheep, number.....	10	12	60,000	10	32

NOTE.—No reports from January to June, inclusive.

IMPORTS.

MONTH.	July, Aug. Sept. Oct. Nov. Tot'l				
	1888	1889	1888	1889	1888
Lath.....	10	12	60,000	10	32
Shingles.....	10	12	60,000	10	32
Rock, Tons.....	10	12	60,000	10	32
Coal, Tons.....	10	12	60,000	10	32
Ties, No.....	10	12	60,000	10	32
Lumber, Ft.....	10	12	60,000	10	32
Merchandise, Tons.....	10	12	60,000	10	32
Brigs, No.....	10	12	60,000	10	32
Barkentines, No.....	10	12	60,000	10	32
Barks, No.....	10	12	60,000	10	32
Ships, No.....	10	12	60,000	10	32
Schooners, No.....	10	12	60,000	10	32
Steamers, No.....	10	12	60,000	10	32

EXPORTS.

MONTH.	July, Aug. Sept. Oct. Nov. Tot'l				
	1888	1889	1888	1889	1888
Grain.....	10	12	60,000	10	32
Merchandise.....	10	12	60,000	10	32
Fruit.....	10	12	60,000	10	32
Canned goods.....	10	12	60,000	10	32
Honey.....	10	12	60,000	10	32
Lard.....	10	12	60,000	10	32
Beer.....	10	12	60,000	10	32
Tallow.....	10	12	60,000	10	32

Wool.....	63,300
Hay.....	108,732
Beans.....	2,250
Hops.....	4,750
Wire.....	4,161
Brick.....	921,420
Lumber.....	138,230
Terra cotta.....	158,530
Tea.....	14,060
Hides.....	234,414
Paper.....	145,520
Salt.....	152,755
Iron.....	127,400
Wine.....	5,250

Total in pounds.....13,636,332
San Pedro has a population of about 2000.

LONG BEACH.

One of Our Pleasant Seaside Resorts—Points About the Beach.

Within the past year about 100 of the better class of houses for homes have been erected. All the land in the vicinity is well watered and suited to agriculture or to horticulture, and is subdivided into farm lots of five, 10 and 20 acres each. Many of these, within the year, have been purchased by settlers, and are now occupied by families making a beginning in fruit-growing. Of the trees set, those of apples and figs lead, but there are also set many French prunes, Kelsey plums, peaches, pears, lemons and walnuts.

Long Beach is situated 22 miles southeast of Los Angeles, by the sea. It takes its name from the long, wide beach, which extends for several miles along the bay, in crescent form. The bay is formed by an indentation of the sea, about 20 miles into the mainland. The town has a population of about 1000, and is incorporated. It is a seaside resort, and summer and winter retreat for invalids seeking an equable climate. In the vicinity there is one cheese factory and creamery. Out a little from town considerable barley and corn is raised for shipment, and some fruit from the earliest planted orchards, six years old.

The town and farm lots around are supplied by a good system of water works from artesian wells. The artesian belt runs within about two miles of the seashore.

The Southern Pacific Railroad runs three trains to and from the town, which is the terminus in this direction. The telegraphic and telephonic facilities are good. The postoffice is a money-order office. There are two good public schoolhouses. The town is settled by an educated, temperate class of people.

SANTA MONICA.

The Noted Seaside Resort, Where the Wild Waves Say Things.

This delightful seaside resort and watering place made great strides as the popular resort for Los Angeles people during the past year. The fact that two lines of railway were in operation between the two places (the Southern Pacific branch and the Los Angeles and Pacific) running frequent trains and making quick trips had much to do with taking down crowds of pleasure-seekers. It was not an unusual thing for 10,000 people to be assembled on the beach at one time during the height of the bathing season. The burning of the hotel at Long Beach the winter before and the fact that the big hotel at Rodondo was not yet constructed, left Santa Monica far ahead in point of accommodations for visitors and the elegant Hotel Arcadia was facile princeps.

Santa Monica was not only the resort for wealthy people who could afford hotel life and for the other wealthy and well-to-do classes who have cottages of their own, but it was the democratic resort as well. Many tents were pitched there, and many who could manage to get only a day or two at the seaside also gave the place their patronage. During the year Santa Monica made considerable strides in the way of public and private improvements. Long stretches of graveled streets were made, and three miles of cement pavement made. A number of handsome residences were erected and a building completed for the waterworks system.

There is now in contemplation an immense Catholic College to be built adjacent to Santa Monica at a cost probably of \$1,000,000. An architect has been engaged on the plans for some time; a large tract of land has been donated for the purpose and details will be announced shortly.

Santa Monica is the great resort for inmates of the Soldiers' Home, which is located only a few miles back from the coast, and a large part of the produce supplies are drawn from the country lying thereabouts.

THE PALMS.

A Pleasant Spot for Homes Near the City—What Is Found There.

The marvelous growth of trees and the setting out of orchards has made an enviable reputation for this little village just under the western shadow of Los Angeles. What was formerly

one large tract of unimproved land is now dotted over with pretty homes. During the past year several new residences and three brick stores have been built, a new church (Baptist) organized, and various minor improvements made. The present population is probably less than 500, though there is an attendance of over 100 pupils at the public school.

This section offers special inducements to small farmers, being close to three local markets, viz.: Los Angeles, Santa Monica and The Palms. Good orchard land can be bought from \$80 per acre up, according to location, while alfalfa and corn furnish the requisites for stock, butter and poultry.

The Palms has eight daily passenger trains (being located on the Santa Monica branch of the Southern Pacific Railroad), which affords comfortable and rapid transit to and from the city. This has induced quite a number of business men in Los Angeles to locate and build residences here. The Palms and Santa Monica are the only towns that maintained regular daily rail communications with Los Angeles during the recent heavy storms.

WHITTIER.

The Quaker Town—Progress and Prospects.

One of the prettiest towns in the county is Whittier, a Quaker city in the foothills. Its location is upon the mesa against the Puente hills, and it commands a view that is simply unsurpassed. The Whittier citizen sitting upon his front porch has the Santa Ana Valley spread out before and beneath him, and can see Pasadena, Los Angeles and the ships riding at anchor at San Pedro harbor. He is only 15 miles from Los Angeles as the crow flies, and at night the lights of the city shine brightly seemingly within a mile or two. The town is made up of a thrifty, energetic population of some 1500 souls, and they have made it a handsome, delightful spot to live. It was named after the poet Whittier, and his peaceful temper seems to have cast a pleasant halo about life in Whittier. Among the permanent and extensive improvements now going on in Whittier is the erection of the State Reform School for Southern California. The buildings are now going up, and a large sum will probably be expended by the State in equipping the institution. During the past year the growth of the town has been steady. New families have come in and purchased homes, and several new business buildings have been built. Whittier is an illustration of the marvelous rapidity with which fruits, grain, flowers and vegetables grow in this section of the State. It is comparatively a new town, having grown up during the past three years; but where formerly was a barren mesa are now the streets and residences of a thriving place, and with its orchards and wealth of beautiful flowers, the town now stands revealed in rare loveliness. Grain flourishes without irrigation, and the fields around and about show what abundant results are reaped by the careful and industrious class of citizens who have settled in this garden spot. The population of Whittier is made up largely of Quakers from the States of Ohio, Indiana and Pennsylvania and elsewhere, and from the nature of the solid and substantial homes they have built it is evident that they have cast their fortunes with the place.

The church and school facilities at Whittier are excellent. A fine new school building has been completed during the year, and the course of instruction is as good as it is anywhere. The groundwork for a flourishing little city has been carefully and broadly laid. It will not be long before a thoroughfare or boulevard will be constructed from Los Angeles to Whittier, which will increase the already excellent transportation facilities between them. The railroad which now connects Los Angeles and Whittier meets the present demands, there being morning and evening trains. A much larger growth is expected in this flourishing town during the ensuing than there was during the past year.

More Mountain Trout for California.

We are informed that the California Fish Commission, says the Ashland (Or.) Record, will make spawning-grounds at points in Siskiyou county, where Cottonwood, Shovel, Horse and other creeks empty into the Klamath River, where mountain trout will be caught with nets, stripped of their eggs and returned to the river. The eggs will be taken to the hatchery at Sisson, and from that point distributed in other streams of the country. The mountain trout of the tributaries of the Klamath are superior eating.

A tract of 20 acres near Orland is leased to Chinese gardeners, who supply the farmers for miles around. Ten men are engaged in the work and each year one drops out and goes to China with a comfortable fortune.



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The Times.

BY THE TIMES-MIRROR COMPANY.

H. G. OTIS,
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Annual Trade Number.

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POPULATION IN 1889:

Of Los Angeles City 80,000
Of the City and County 160,000

Assessed Wealth of County : : \$84,376,319
Estimated Real Estate Sales, City : \$35,309,466
Value of Buildings Erected, City : \$4,428,919
Bank Assets, City and County : \$15,571,798
Bank Deposits, City and County : \$10,329,963
City Postoffice Receipts : : : \$120,000
Increase of Pieces Delivered in 1889, 1,138,185

ELEVEN RAILROAD LINES FOCUS HERE.

JANUARY, 1890.

WHAT WE HAVE TO OFFER.

After all, the eastern man may say, who has read and heard so much about the manifold and varied attractions of Southern California, what solid advantages have you to offer to induce a man to leave his eastern home and cast in his lot with you? I have heard much of your climate and scenery, but a man cannot very well live on either or both of these.

The question is a fair one, and we will endeavor, in as few words as possible, to answer it.

First and foremost—but not by any means alone—comes our incomparable and almost perfect climate. We are perfectly aware that the subject of "Southern California's 'glorious climate'" has become to a great extent, what in vulgar parlance is termed a "chestnut;" yet we shall not be prevented by such a consideration from boasting of this jewel of great price, which so many lands would give anything to share with us. Let soured and shivering denizens of eastern and northwestern snowfields perpetrate their feeble jokes on our climate, to their heart's content; that shall not make us ashamed to speak of our greatest heritage.

Climate is, after all, the most important feature of life. It is the condition of the air which we breathe. While, from the East, we get reports of snowstorms and blizzards, we have here balmy airs, blue skies and bright sunshine. Is it not worth something to live in a city where the thermometer has only gone below 32° six times during the past 10 years? A man will give much for his life and he will therefore—if he is wise—be willing to make almost any sacrifice to get to a section of country whose climate will prolong life. Such a climate is Southern California.

But it may be replied, California is a large State, 700 miles long. It contains a vast amount of climate. Are you not

rather "bulling" the climate market, in view of the large supply of the article?

Not so! It must not be supposed that all California is alike—that it is only necessary to cross the Sierra Nevada to find the perfection of climate. Such is far from being the case. The area of the State in which perfect climatic conditions exist is quite limited, and those who wish to secure a home within the climatic belt at a reasonable price should not let any grass grow under their feet. The physical configuration of the land causes this belt to be confined to a strip extending from Point Conception, in Santa Barbara county, to San Diego—about 250 miles—and extending back from the coast 40 miles—say 10,000 square miles, or 6,400,000 acres. After deducting inaccessible hills, watercourses and other places which cannot be cultivated, we have perhaps 5,000,000 acres of arable land which carries with it a title in perpetuity to a proportionate share of the finest climate in the world—say enough to give 500,000 families 10 acres apiece.

The climate, even within this favored region, is of course not absolutely perfect—there is none such in the world, but it comes a little nearer perfection than any climate that exists elsewhere. It is a climate which possesses that rare faculty of letting one alone, to pursue one's avocations in peace. One is not reminded of the subject of the weather by extreme heat or cold—by frost or snow, and their attendant discomforts. One can work well during the day, and sleep restfully at night. It is only new arrivals who exclaim: "What a beautiful day!" After a person has been here a few months, it is taken as a matter of course that the day should be fine.

So much for the climate. Next in order comes the soil.

We believe we risk nothing when we say that, in no part of the world—certainly in no section of the United States—can so large returns be made from an acre of ground as in Southern California, or so great a variety of valuable products be raised. Here—often side by side—may be raised not only such semi-tropical fruits as the orange, lemon, citron, lime, pomegranate, olive and fig, but also the northern fruits and berries, the cereals, and immense crops of vegetables, which can be gathered and shipped in winter, at a time when eastern vegetable gardens are under snow. Our fruits may be shipped green, dried or canned. At home we have a ready market for more dairy produce than we can raise. Orange orchards have paid over \$1200 an acre; berries over \$500; walnuts over \$300; apples \$150 to \$200, and winter vegetables enough to pay for the land in a year. A man can make a good living for himself and family and lay by money on 10 acres of land. Where else can this be done? How many eastern farmers are doing as well on 100 acres?

Another material advantage which Southern California offers to enterprising men is the rapid development of the country, and the consequent numerous openings which exist for the profitable employment of capital and labor. While the collapse of the speculative real-estate boom has put an end to the mushroom-like growth of paper towns, it has not affected our solid growth. Water is developed in a granite mountain, and piped on an arid plain, where, as long as the memory of man lasts, no living thing, but the coyote and jack-rabbit, or an occasional *vaquero*, ever broke the stillness. Then comes the magic touch of water, and—presto, what a change! The erstwhile arid plain is covered with handsome, tree-embowered homes, and within a dozen years ships fruit to the value of a million dollars. Southern California is now in the formative stage, and men of enterprise and courage who venture their capital, muscle or brains in assisting to build up the coming State will reap an hundred-fold. The capitalist may make a fortune by developing water—which in Southern California is king—for agricultural and domestic purposes, in building narrow-gauge railroads, in erecting gas works, or in purchasing large tracts of farming land at a mod-

erate price, subdividing and selling it to settlers in small tracts, on easy terms of payment. For those who prefer to cultivate the soil, there are big rewards. The man who plants an orange orchard will have a good income in five years, and at the end of ten years can count on 100 per cent. a year on his investment. Mining offers great inducements to the capitalist in Southern California. It is a comparatively virgin field, but the indications of mineral wealth are great and widely-distributed. In the line of small manufacturing there are also many openings for the profitable use of capital. Among other things may be mentioned the establishment of glass factories, fruit canneries and drying works. Stoves, furniture and leather might be made here on a considerable scale, while for those who have large capital at command, and understand the business, there is a splendid field for the establishment of several beet-sugar factories. Finally, if a man wishes to lend his money on mortgages, he can get from 8 to 10 per cent. net in Los Angeles, on gilt-edged security.

Men who have only muscles and industry can do well here also. In our interviews with farmers will be found accounts of several who came to Southern California "broke" ten or twelve years ago, and now have comfortable homes, with, in some cases, property paid for and money in bank.

Add to all these things easy and rapid communication from place to place, good schools and colleges, churches, libraries and theaters, and a refined, hospitable and educated class of people, and you have at least a few of the great and solid inducements which Southern California offers to those who are seeking a new location.

MANY CLIMATES.

All of Southern California is not a semi-tropical region. It has many climatic belts, in which certain variations exist which so modify it in some respects as to produce in some localities a peculiar fitness for certain productions such as do not exist, perhaps, in localities lying within the range of a few miles. There are frostless belts where the banana thrives even far up on the foothills. There are sheltered spots where the date will ripen, and where the sun appears to center its warmth; here a cañon's wall lifts its sheltering sides, shutting off every harsh wind, and reflecting the sun's rays from its walls. How every tropical thing loves such shelter and springs into swift growth and perfection. There are other points where the orange does not give the best results, but close at hand, perhaps, just the conditions required for its perfection exist. You can hardly determine in what this modification consists. You only recognize the fact of its existence. There are points where as good apples can be grown as those found in New England orchards, and beside them flourish the orange, the guava and the nectarine. The quality of our sunshine is not strained. It has elements for every needed growth, whether of a temperate or semi-tropical character. It is diffusive and abundant, and in its constancy, perhaps, is hidden the secret of its marvelous results.

OF THE GREEK TYPE.

It is the old Greek life that is coming again to the shores of the Pacific. Here will be built our modern Athens, and great commercial cities upon the shores of the few harbors that indent our coast. Few and far between are the highways of commerce to the sea upon this coast, but where these outlets do exist traffic will flourish.

Upon one of these grand outlets Los Angeles is built. Through the mighty wall of mountains surrounding her the railroad forced its way at Tehachepi, so that coastwise can tend the commercial products of all the vast territory beyond the mountains. Los Angeles is not only the depot of supplies for a great region of country, but she is also the center for commercial traffic for the whole of Southern California, and when once her harbor improvements are perfected, and all her lines of railroad completed, she will send out to all the markets of the

world her stores of oil and wine, her nuts and her olives, her oranges and figs, and her inexhaustible supplies of corn and grain. Although now a city of more than 75,000 inhabitants, she is but the germ of the fine commercial and manufacturing city that she will be in the future.

AN EXPRESSION OF THANKS.

For valuable assistance rendered in compiling the facts and figures presented in this number, THE TIMES desires to express thanks to State Controller John P. Dunn. To all of the city and county officers who have taken especial pains to furnish statistics of their several departments; to Postmaster Preuss and his deputy, Mr. Flint; to Collector of Internal Revenue, Guy Barham; to the Receiver of the United States Land Office, I. K. Polk; to the Collector of the Port of Wilmington, George Hinds; to Col. Treichel, Governor of the Soldiers' Home; to Col. Grierson, in command of the Military Department of Arizona, and Mr. Franklin, Signal Service observer. To the secretaries of the Board of Trade and Chamber of Commerce; to J. P. Culver, civil engineer; W. H. Storms; Albert F. Kercheval, poet and orchardist; C. N. Wilson, apiarist; Charles A. Gardner, poet; A. D. Childress, of the City Bank; Mr. J. C. Robinson, manager of the cable system; F. W. Wood, manager of the Temple-street railway; W. J. Brodrick, manager of the Main-street and Agricultural Park Railway; to the officials of the Southern Pacific and Santa Fé systems, and a host of correspondents; *Mil gracias, caballeros!*

THE GOLDEN MEAN.

This is a summerland, and yet a land without a summer, if summer be characterized by sultry and oppressive heat. Between the coast region and the warmer inland valleys rise the vast walled sierras, shutting off from us the hot winds from the desert. Between us and the outer ocean sleep the channel islands, shielding us from the chilling ocean breezes. Balmy and soft are the winds that reach us from the sea, tempered by the hot air that has settled down upon the ocean after drifting over the mountain tops from the desert wastes beyond them. The high upper stratum of dry air relieves the sea breeze from its dampness and gives to our climate the peculiar dryness which distinguishes it from the climate of the Atlantic Coast. Nowhere else upon the globe do the conditions for climatic comfort exist so fully as with us. To understand them fully one must come here and enjoy them. And coming one will be loth to leave the land where Nature does not trouble us, but where she is serene, restful and perfect.

OUR FOOTHILLS.

The great foothill slopes of Southern California are most favorable to the culture of the grape. The stranger unacquainted with our soil, looking at these hillsides when browned by the summer sun, might regard them as barren and undesirable. But plowed and watered and set to vineyards, they become marvelously productive. The grape loves these warm, sunny slopes, where the soft breezes toy with its leaves, and the sun searches its soil, and rich and juicy are the fruit which they yield. A hillside vineyard is a thing of beauty and of pride to the owner, for there his fattest grapes hang in purple clusters like the grapes of Eschol, sweet with the touch of the warm southern sun, and ready to be turned into the wine which "maketh glad the heart of man."

FROM MOUNTAIN HEIGHTS.

The new observatory upon the summit of Wilson's Peak will be 6000 feet above the sea. It will also be above the fogs of the valley—the white drift of clouds. There will be but comparatively few days in the year when above this proposed new observatory, with the largest telescope in the world, will not bend the unclouded starry skies, affording the scientist the opportunity to push his investigations continuously. Here he can map out

celestial highways unhindered, and study the vastness of planetary spheres. Here he can weigh suns, trace out the pathway of comets, search for starry wanderers and roam the star-gemmed Milky Way with the clouds and the mist floating below him and only the clear, silent, star-lit firmament above his head.

PRICES OF THE ANNUAL.

The following are the rates charged to all, whether agents or not, for this publication:

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A thousand people each buying and mailing 10 copies at a cost of \$1, can secure a total circulation of 10,000 copies abroad; the effect of which will be to bring into our midst hundreds of new settlers, with thousands of dollars of fresh capital. Try it!

CONTENTS.

A full index of the contents of this Annual will be found on the last page.

THE Flower Festival Society is an appropriate and unique Los Angeles institution, composed of a band of prominent ladies, who give each year a grand floral carnival at Hazard's Pavilion. The object of the society is to provide, at a reasonable figure, respectable boarding places for young women who work in stores and factories. The society has a commodious building on Fourth street, where young women are boarded at cost; or, if their salaries do not justify even that outlay, at less than cost. The fair occurs annually in April, and every tourist who visits it will feel well repaid for his time.

ONE of the attractions of a residence in Los Angeles is the great variety of charming summer excursions which may be made within an easy distance of the city. On the one hand, for those who love the sea, there are the beautiful beaches of Santa Monica, Long Beach, Redondo and other places, while those who prefer the mountains may find delightful camping places among the pines back of Pasadena and Monrovia. All these are an easy day's journey of the city; in fact, one may go and return within the day, after a good, long sojourn at either of these resorts.

IT is summer with us in the valley. Oranges are turning daily more golden in the sunshine. The palm waves softly in the light breeze, and millions of flowers are abloom in garden and on hillsides. But above the valley is lifted the Sierra front, and there winter is enthroned. Gorge and mountain crest are filled with the white snow drift. Hoary and white as Mt. Blanc are the loftier peaks of the Sierra Madre. Up to their frozen heights floats the fragrance of our summer valleys, and winter and eternal summer clasp hands beneath skies filled with flooding sunshine.

WE almost fear to say how many people Southern California could support in comfort, and even luxury, were our fertile acres developed as they should be. Our eastern readers would accuse us of giving them what they would term a "California yarn." When it is remembered, however, that, as is clearly shown in other columns of this issue, an industrious man can support a large family on 10 acres, and put by money in bank, we are justified in predicting that some day there will be a million people in Los Angeles county alone.

WE do not hear so much talk nowadays about the fruit market being "overdone." In fact, the more fruit that is grown, the better the market is, as it pays eastern commission men to compete for a quantity, where they would not care to trouble about a few carloads. The fruit business of California is yet in its infancy. Ten years hence we shall be shipping a train load for every carload that goes East at present.

THERE is everything in this section to foster the love of country. Pre-eminently here should flourish men loyal to the land in which they live.

So sumptuous is Nature; so rich in productiveness; so genial in her climatic charms; so grand and sublime in the loftiness of her mountains and the extent of her sea; so unrivaled in her sunshine, and so picturesquely beautiful in her broad and ever-varying landscapes, that it would seem impossible for one to live here "with soul so dead" as not to rejoice continuously in the fact that this is a part of his country, the home of American freedom.

WHEN the rich oil-fields of Pennsylvania have become exhausted, the country will find in those of California at least a partial substitute. Though only a small portion of those fields have been developed, indications point to a large supply of this natural illuminator—enough for all purposes of home manufacture, for fuel and for light. When our thousands of new manufacturing shall have been built, Nature stands ready, with her supplies of oil, to keep all the busy wheels of industry afloat.

THIS is a section of good schools. We are people who set great store upon education. Colleges and schools of the first order abound on every hand; in fact, Los Angeles bids fair to become a modern Athens. Teachers of art, science and literature also abound. The total disbursements for carrying on the county schools during the past school year were \$389,419, and bonds to the amount of \$219,540 were sold during the year for the purpose of erecting and furnishing school buildings outside of the city of Los Angeles.

WHAT would our eastern small farmers think of a continuous harvest-field of 60,000 acres of wheat? Let them come here at the proper season, and from the heights back of Los Angeles they can look down upon such a vast billowy sea of golden grain in the broad and fertile valley of the San Fernando. But at this season the valley reminds us of the "green pastures and still waters" of which we read. It is a magnificent prospect, while overhead are cloudless skies and an ocean of sunshine.

OUR mountains look bare and frowning as we glance upward at their sides, but upon them grow great fields of white sage and other plants, from which is made the most delicious honey. The bee loves these wild mountain pastures, and in their midst are numerous bee ranches, and upon these higher pasture grounds feed also innumerable sheep. These craggy heights are, too, the delectable lands of the goat, who finds amid the rocks ample sustenance.

DON'T forget that Los Angeles has a good summer as well as winter climate. Situated, as we are, within about 12 miles of the coast in an air line, we have no extreme heat to contend with, the summer nights especially being invariably cool and refreshing. Yet, so widely disseminated is the idea that this is a country of torrid temperature, that visitors who come to see us during summer are continually expressing surprise at our pleasant weather.

THE boom has vanished, but it has left neither discouragement nor business paralysis behind it. Business is active in all its channels, and the prospect was never brighter for a year of solid prosperity than now exists. The rains have been copious, enough already to assure abundant harvests; and all our cultivated lands hold the promise of overflowing crops. We are by no means dead, and our faith in the future of this section was never livelier.

THE past year has been a noteworthy one for our horticulturists. The orange-growers have got rid of their long-time enemy, the white cottony-cushion scalebug. The victory was won for them by an Australian ladybug—*vedolia cardinalis*. As a consequence the orange-growers are, to use a hackneyed expression, "jubilant." Many orchards which seemed irrevocably lost are now making fresh and vigorous growth.

THE theater-goer will find plenty of attractions in Los Angeles. We have two regular theaters, which are run-

ning all the time, besides which there is Hazard's Pavilion, which has the largest seating capacity of any building on the coast used for dramatic purposes, affording comfortable room for 3000, and the new Turnverein Hall, which can seat 1200. All the leading attractions which visit the coast come to Los Angeles.

SOUTHERN CALIFORNIA does not brag all the time about her capacity for growing oranges, as do some of our esteemed friends in the northern part of the State. While our northern neighbors are talking about what they can do in the line of oranges, Southern California is shipping them at the rate of over 2000 carloads a year. So far, orange growing north of Kern county has been mainly confined to talk.

WHEN you compare the prices of land here with those to which you have been accustomed back East, you must remember that an acre here, planted in the most profitable crops, will yield a greater return than 10 acres of ordinary land back East. Therefore, according to mathematical rule, it certainly ought to be worth ten times as much, with the climate thrown in. Yet it can be bought for much less.

WHAT may be done in the way of fruit-raising in Southern California has been shown by Riverside, which received last year over \$1,000,000 for its oranges and other fruit. Yet, it is only about fifteen years since Riverside was an arid plain, the land being valued at 75 cents an acre by the County Assessor, which valuation the owner thought too high and complained of.

As a railroad center, Los Angeles is facile princeps in the State. San Francisco comes in a bad second. What is more, our lead is increasing. Wealth begets wealth, and railroads follow railroads. It is a noteworthy fact that all the new lines which are seeking entry to the coast want to come to Los Angeles. We may expect to see at least one new line constructed this year.

WHILE Los Angeles cannot be called a manufacturing city, it will be seen, by reference to another column, that we have quite a variety of factories here, employing in the aggregate a large number of men. With cheaper fuel, such as may be expected with the advent of a Salt Lake railroad, we may expect to see the manufacturing industry take a big bound forward.

IT is not fair for tourists to spend a week in Southern California and then go back East under the impression that they have seen the country. This is a section of such marked and manifold variety, that one might easily spend a year between Santa Barbara and San Diego—between the ocean and the mountains—seeing something fresh and interesting every day.

WE still import far too much produce from the outside. Our eggs, butter, cheese and hams should all be raised at home. There is big money for those who go into the business of supplying what is now imported from abroad. We want more chicken ranches and dairy farms. Alfalfa, squashes and corn grow here luxuriantly, furnishing excellent feed.

SOUTHERN CALIFORNIA has not the extensive forests which exist in the northern portion of the State, but it is a great mistake to suppose that this section is altogether bare of timber. On the spurs of the Sierra Madre may be found noble pines and firs, while many of our plains are dotted over with majestic live oaks, in park-like clumps.

LAND for ordinary agricultural purposes may be purchased in Southern California at from \$20 to \$100 per acre, while land that is improved with orchard or vineyard may be bought for from \$100 to \$500 an acre. The latter, of course, yields an immediate return. From 10 to 20 acres, well cultivated, is all that a family needs in this section.

OUR winter weather must not be judged by the sample we had last month—a month of almost continuous rain. The average number of rainy days in the year in Los Angeles is 20—that is, counting all days upon which

any rain falls. This winter has proved such an exception to the rule as has not been seen for many years.

THERE are some eastern products with which we cannot well compete in Southern California. Among others, we may mention ice, snow, blizzards, cyclones, mosquitoes and bedbugs. Perhaps we might raise some of these things if we wanted to, but then we do not want to, very bad.

THE New Year is not greeted, upon its arrival here, as in the East and Northwest, by snow and ice and fog, but by sunny skies, green fields and bright sunshine—by happy children, romping bareheaded and barefooted among the roses and heliotropes and lilies.

THE TIMES has made a specialty of careful, conscientious, and independent dramatic criticism, employing the best talent obtainable. In this Annual Trade Number will be found a carefully-compiled and interesting review of the dramatic year in Los Angeles.

THE climate of Southern California is not enervating in its tendency, as are those of most southern countries. On the contrary, it is most invigorating. Our dry, electrical atmosphere and cool nights make the well man stronger and give life to the invalid.

THERE is plenty of romance in Southern California for those who care to seek it. This has been the home of vanished races, concerning whom we know but little. The archaeologist and the student of history will find much to interest them here.

VERY few people, east of the Rocky Mountains, are aware of the area of the five counties comprising Southern California, and many will be surprised to read that they have an area almost 4000 square miles larger than the State of Ohio.

OUR cable railroad system, which is now completed, is a credit to the city and to the company which built the road. There is certainly no city in the world, of the size of Los Angeles, with so complete a system of cable railroad.

THE chief exports from Los Angeles to the East are dried and green fruits, wool, wine, brandy, hides, vegetables and potatoes. During the orange season as many as 25 cars loaded with oranges sometimes leave the city daily.

THE Public Library is one of the Los Angeles institutions of which our citizens are justly proud. During the year, 4771 volumes were added to the library, and the elegant new quarters in the City Hall have been fitted up.

THE cost of building in Los Angeles has fallen very materially during the past two years. Material and labor are both much lower, and a cottage which would have cost \$1500 in 1887, can now be built for \$1000.

TWO large tracts of unimproved land are reserved by the city for parks, but the only parks worthy of the name at present are the Sixth street and Second street parks. The former is small, but quite a gem in its way.

UNIMPROVED land for orange culture may be had at from \$150 to \$300 an acre. This is land upon which the orange will reach perfection. There is none too much of such land, even in Southern California.

WHEN our harbors are improved, as they soon will be, a large amount of Asiatic and Australian trade will come to Southern California. Los Angeles will then more than ever be a busy commercial mart.

THERE is a considerable amount of valuable property in this county, even at the Assessor's estimate and after-boom figures. An assessment of \$84,000,000 for the county is a pretty good showing.

EIGHTEEN hundred and ninety opens very auspiciously for Los Angeles. The evil effects of the boom are fading away and our citizens are beginning to put their hands to the plow in earnest.

HAVE you, men and brethren of the East, anywhere 3000 feet above sea level, great wheat-growing valleys which

yield in rich abundance their golden harvests? We have them here, where the finest of wheat is grown, as in the Antelope Valley for instance, and the harvests are abundant.

WHAT a remarkable growth! Population of Los Angeles in 1880, 11,183; in 1890, 80,000. During the same period, the taxable wealth of the city has increased from \$7,627,632 to \$44,871,073.

THE Spanish-speaking population of Los Angeles is very intelligent. Scores of them hold important positions, and their records will compare most favorably with those of any other nationality.

Now is assuredly a good time to buy real estate. There are great bargains to be had in and around Los Angeles, from persons who are on the wing, as so many Americans always are.

OUR visitors must not think that we can only raise oranges and lemons in Southern California. This is a good corn country, and we can beat the world on "punkins."

ON one acre of land in Southern California the settler can raise, at all seasons of the year, a greater variety of vegetables than his family will be able to consume.

THERE are fruits in the Los Angeles market every day in the year, from oranges and strawberries in January to strawberries and oranges in December.

THERE are good indications of natural gas in the neighborhood of Los Angeles. No serious effort has yet been made to develop it, or to prove its existence.

LOS ANGELES is a city of churches. Almost every sect of prominence known in this country is represented. Strangers are always cordially welcomed.

SOUTHERN CALIFORNIA is able, with proper development, to supply the Nation with wine, oranges, olive oil, figs, raisins and honey—also with climate.

THE charge that Los Angeles is an ill-paved city will soon be groundless. We spent last year nearly \$150,000 on pavements, sidewalks and sewers.

RENTS are far more reasonable than they were two years ago. There is no trouble about finding houses to suit any one just now, in Los Angeles.

LOS ANGELES county lost about \$10,000,000 of property by the secession of Orange county. It all remains in Southern California, however.

It is estimated that over 20,000 persons in Los Angeles belong to secret societies. All the prominent orders are represented.

It is certainly a pretty healthy kind of a "busted boom" when a county can show over \$10,000,000 cash on deposit in its banks.

LOS ANGELES is the central commercial point for Southern California, Arizona and New Mexico.

EXAGGERATION is unnecessary in writing about Southern California. The truth is good enough.

FOUR and a half million dollars invested in buildings is not a bad showing for a "dull" year.

LOS ANGELES is a cosmopolitan city. Almost every nation under the sun is represented.

LOS ANGELES COUNTY is more than two-thirds as large as the State of Massachusetts.

LOS ANGELES is the city for ideal homes.

Semi-tropic December.
O tropic skies! what hand hath poured your
 gold

And laid soft, amber touches on the hills,
With daisy stars 'mid the green grasses told,
And loosed the voices of the singing rills?

Were ever skies more fair than those that bend
Sun-flooded o'er the old year's sleeping
 breast?

Did ever flowers more tenderly lend
The fragrance from their dewy petals
 pressed

To the soft wind, which, incense-laden, sweeps
Where blossom-crowned December dyes
 sleep?

ELIZA A. OTIS.

LOS ANGELES FINANCIALLY.

[Daily Times, Dec. 23.]

THE TIMES has on various occasions dwelt upon the satisfactory financial condition of the city of Los Angeles, as respects its banks, and now touches upon the matter more in detail, giving some of the significant official figures which make the basis for the faith expressed.

A condensation from the detailed statement made up from the Bank Commissioners' Report shows the following Los Angeles city commercial banks and banking institutions and their condition, as respects the three items of (1) capital paid up; (2) money on hand, and (3) total assets, on the 1st day of July last, to which time the report was made up. The names of these institutions are: Farmers' and Merchants', First National, Los Angeles National, Los Angeles County, Southern California National, City Bank, University Bank, California Bank, East Side Bank, State Loan and Trust Company. The National Bank of California, which has been started since the 1st of July, and is not embraced in the Bank Commissioners' Report, is included in the following summary, which shows these aggregate figures, viz:

Capital paid up.....\$ 2,442,491.00
Money on hand.....2,283,443.35
Total assets.....12,712,541.73

The city savings banks are the following: Los Angeles Savings Bank, Savings Bank of Southern California, Security Savings Bank and Trust Company, Main Street Savings Bank and Trust Company. They collectively show the following figures:

Capital paid up.....\$ 151,330.00
Money on hand.....20,228.34
Total assets.....902,906.31

The banks of the county are: San Gabriel Valley, First National and National, at Pasadena; First National, People's and Pomona Bank, at Pomona; First National and Granite Bank, at Monrovia; Bank of San Pedro; First National at Santa Monica; Bank of Alhambra; Blythe, Scott & Maholm, at Downey, and Ricker, Mason & Lindley at Whittier. These banks, together, show the aggregates given below:

Capital paid up.....\$ 605,525.00
Money on hand.....158,946.16
Total assets.....1,865,350.75

The grand recapitulation shows for city and county banks assets of \$15,571,798.78; cash on hand, \$2,468,617.35; total available cash for both city and county banks, \$5,280,879.96; total capital paid up, \$3,199,346; total surplus, \$1,525,034.04; total capital and surplus, \$4,724,380.04; total deposits in city and county banks, \$10,329,063.66.

Grand aggregates which might safely be arrayed alongside of the banking operations of any city in the country.

In the case of two of the leading national banks of the city—the Los Angeles and the First—the following detailed figures are given, showing the condition of these banks on the 11th of December, when their last official statement was made. The First National has aggregate resources of \$2,344,629.90, consisting in part of United States bonds, \$150,000; loans and discounts, \$1,150,311.10; stocks and other securities, etc., \$244,262.02; due from approved reserve agents, \$114,612; due from other national and State banks, \$116,513.38; banking house, etc., \$91,634.04; specie, \$418,260. Its capital stock paid in is \$200,000; its surplus, \$50,000; its undivided profits, \$185,726.33; its United States deposits, \$100,989.48, and its individual deposits subject to check, \$1,510,569.62. The head of this strong institution is the old-time banker and citizen, E. F. Spence.

The Los Angeles National—Major Bonebrake's bank—is an example of a rapidly-built-up and remarkably successful financial institution. It came into existence but a few years ago, and is now recognized as one of the financial bulwarks of the city, county and State. It has aggregate resources of \$2,231,923.69, the principal items of which are: loans and discounts, \$824,603.66; stocks and bonds, \$72,181.11; banking house, etc., \$173,505.44; available cash, \$1,148,106.06. Its capital stock is \$500,000; its surplus, \$55,000; its undivided profits, \$52,645.74; its circulation, \$45,000, and its deposits, \$1,579,277.95.

All the banks of Los Angeles are worthy of the name; none are wild cats or gophers. Let distant critics make a note of it.

CHARACTER SKETCHES.



Shooting
The Mountain Goat.



Caught a big one
At Catalina.



Indians and Burro.



The Typical Serenade.



A Wayside House.



Vegetable Chinaman.

SEEN FROM MY WINDOW.

It is the last day of December, but over us are spread the bluest of unclouded skies. The sunshine is warm and the air in these summer valleys holds but the faintest hint of the chill that wraps the summit of the snow-clad peaks 9000 feet above our tropic calm. Looking from my window I see the earth covered with lush green grasses. The purple-winged doves are fluttering on the house-tops. A yellow butterfly is loitering in the sunshine, and the flies are swaying with a merry hum in the mazes of an airy dance.

A little barefooted boy runs along the highway, and stops long enough to thrust his small toes into the trickling stream that runs singing along the gutter, a lingering tide ground out by the late rains. Across the street are lovely homes set in the midst of pleasant shade. In the grounds immediately across the way are the swaying branches of the date and fan palm, side by side with the cool emerald of the cedar. Bananas wave their long, drooping branches, and the Japanese bamboo thrusts forth its thrifty arms. How beautiful is the lovely magnolia and the blossoming Gravelia. How like magic-lanterns swing out the red blossoms of the glowing hibiscus, and like a whisper of the ages gone, which passed along the Nile with the grandeur of their vanished civilizations, is the Egyptian papyrus. Beside it, also, the Nile grass is growing, and beyond it, in the same garden, grow the orange, the lemon and the lime. Here, too, is the Japanese persimmon, with its luscious reddish-yellow fruit, so full of delightful flavor when the sun has ripened it. The Smyrna fig spreads its broad leaves to catch the sunshine, and the tall, sentinel eucalypti thrust their lofty trunks 80 feet skyward. The light breeze sways their tops gently and there is a rustling amid the leaves like the whisper of voices. The brilliant green foliage of the pepper tree is brightened by its numerous clusters of gay scarlet berries, and beneath their boughs are the long rows of blossoming cailas. All the roses, too, are in full bloom, and their fragrance sweetens the dying breath of departing December. Here comes a gay hummingbird in garments of green and gold, fluttering a moment upon an orange leaf, and there a happy song bird wings his way to the crest of a majestic walnut tree. I see, too, a swallow's wings skimming the blue air, and a mockingbird makes his swift flight, seeking some bough on which to sing. The warm and balminess of an eastern spring is with us, and its fragrance of flowers, its melody of song. And so the old year dies as I sit filled with content at my window, and contrast the dying December of the East with that of our semi-tropic climate.

E. A. O.

SAN BERNARDINO BANKS.

A List of the Financial Institutions of the Big County.

The following is a list of the banks of San Bernardino county, with amount of capital, names of officers, etc.:

San Bernardino.—Farmers' Exchange: Capital, \$50,000; surplus, \$81,000; H. L. Drew, Pres.; R. Gird, V.P.; S. F. Zambro, Cash. First National: Capital, \$100,000; surplus, \$15,000; J. H. Smith, Pres.; M. B. Garner, V.P.; Joseph Brown, Cash. San Bernardino National: Capital, \$200,000; surplus, \$12,000; J. G. Bent, Pres.; Seth Marshall, V.P.; W. S. Hooper, Cash. Bank of San Bernardino: Capital, \$200,000; surplus, \$8000; Lewis Jacobs, Mgr.

Riverside.—Riverside Banking Company: Capital, \$200,000; surplus, \$60,000; A. Keith, Pres.; J. A. Breneman, V.P.; O. T. Dyer, Mgr.; E. C. Dyer, Cash.; J. H. Goodhue, Asst. Cash. First National: Capital, \$50,000; surplus, \$8000; A. H. Naftzger, Pres.; L. C. Waite, V.P.; A. Halberlin, Cash.; S. J. Castleman, Asst. Cash.

Colton.—First National: Capital, \$100,000; surplus, \$8000; J. W. Davis, Pres.; W. R. Fox, V.P.; H. B. Smith, Cash.; George E. Burrall, Asst. Cash. South Riverside.—Citizens' Bank: Capital, \$90,000; R. B. Taylor, Pres.; R. B. Woodall, Asst. Cash.

Ontario.—State Bank: Capital, \$44,500; S. P. Hildreth, Pres.; Charles Frankish, Cash.

Redlands.—First National: Capital, \$50,000; surplus, \$3000; F. P. Morrison, Pres.; J. W. Wilson, Cash. Union Bank of Redlands: Capital, \$25,000; surplus, \$2000; Curtis Wells, Pres.; H. B. Lane, Cash.

Florence is an agricultural settlement lying just south of the city of Los Angeles, on the San Pedro branch of the Southern Pacific. It has made satisfactory progress during the year. The farmers are well-to-do, enjoying the double advantage of a fruitful soil and a close market.

THE THEATERS.

DRAMATIC BILL OF FARE FOR THE PAST YEAR.

Managerial Experiences of Wyatt and Douglas—A Good Record—Los Angeles Theater Under McLain & Lehman—Other Notes.

AMONG the points which would naturally interest people of culture in making their inquiries into the desirableness of a new city as a place of permanent residence, it must be conceded that the facilities offered for refined amusement would be one of the most important to take into consideration.

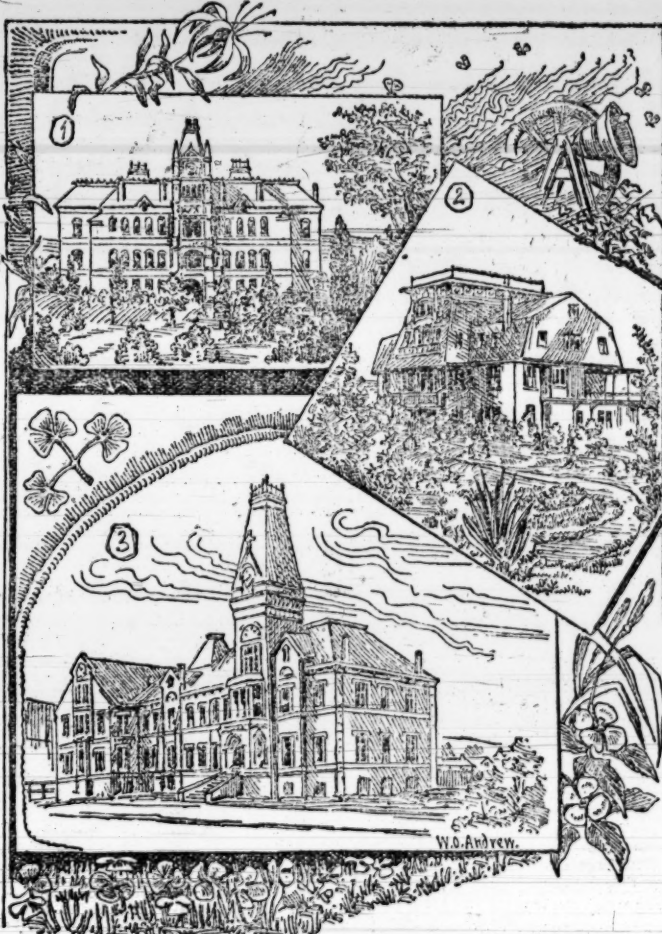
A short statement of fact on this subject and a résumé of what has been offered to the amusement-loving public during the past year is therefore in order.

In the first place there is the Grand Opera-house, opened in 1884, and which is today one of the most elegant theaters in the United States. It has been partly reconstructed since building and was entirely redecorated at considerable expense. It has a seating capacity of 1800. For a long time this theater has been under the able management of Harry C. Wyatt, and the leading attractions that have come to the Pacific Coast have been played here with hardly an exception. In March last Mr. Wyatt associated himself with R. S. Douglas, an experienced manager, formerly of St. Joseph, Mo., and the two gentlemen have given every satisfaction to the patrons of the theater. The list of engagements for the year just expired is as follows, it being premised that in most cases the different companies played one week:

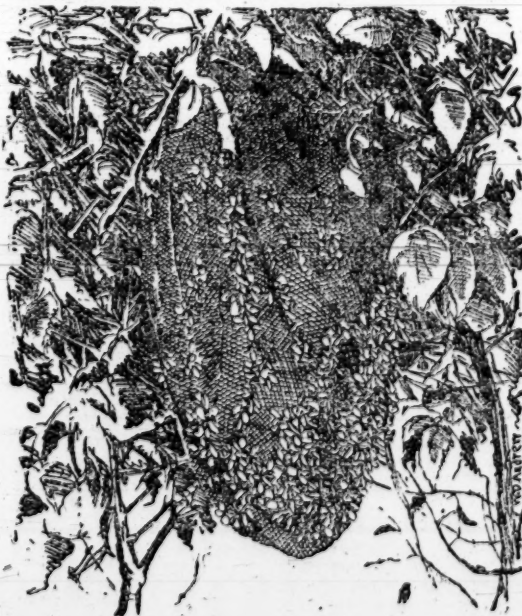
Emma Abbot Opera Company, in *The Yeomen of the Guard* and other operas; Lydia Thompson English Burlesque Company, Leavitt's Novelty Company, Grismer-Davies Company, in *Forgiven and The World Against Her*; Imre Kiralfy's Black Crook Company, Carleton Opera Company, in *Myrlar Jan, Queen's Lace Handkerchief, Ermine and Nones*; J. K. Emmett, Fredrick Warde, in *The Mountebank, Demos and Pythias, William Tell, Virginius, Gaston Cadol and Richard the Third*; Modjeska, in *Mary Stuart, As You Like It, Adrienne Lecouvreur, Camille and Cymbeline*; Sol Smith Russell, *A Hole in the Ground* Company, Conreid Opera Company, in *The King's Fool*; Edie Elster, Little Tycoon Company; Little Lord Fauntleroy Company; Goodyear, Cook and Dillon's Minstrels; "The Bostonians" Opera Company, in *Mignon, Dorothy, Don Pasquale, Bohemian Girl, Musketeers, Pygmalion and Galatea, Fatinitza and Fra Diavolo*; E. H. Sothern in *Lord Chumley and The Highest Bidder*; Johnson and Slavin's Minstrels; Ivy Leaf Company; Old Jed Prouty Company; Twelve Temptations spectacle; Thatcher, Primrose and West's Minstrels; New York Lyceum Company, in *The Wife, Sweet Lavender and The Marquise*; The Paymaster Company; Robert Mantell, in *Monbars and Othello*; One of the Bravest Company; Karl Gardner; Rose Coglian, in *Jocelyn, Peg Woffington and Forget Me Not*; Hoyt's Parlor Match Company; Margaret Mather in *Romeo and Juliet, As You Like It, Honeymoon and Macbeth*; City Directory Company; The Stowaway Company; Murray and Murphy; Henry T. Chaufray; Fanny Davenport, in *La Tosca*; Hoyt's Brass Monkey Company; Little Lord Fauntleroy Company (second visit); Patti Rosa; Minnie Maddern, in *Caprice and In Spite of All*; Stuart Robson, in *The Henrietta*; Rosina Vokes and Felix Morris; Duff Opera Company, in *Paula and A Trip to Africa*; J. S. Murphy, in *Kerry Gow and Shaw Blue*; Bolosay Kiralfy's Antiope Company; Vernona Jarbeau, in *Starlight*.

The Los Angeles Theater was built in 1888 and opened by H. C. Wyatt. It has a seating capacity of 1250 and is prettily fitted, though the arrangements in front of the house are not quite so good as at the Grand, to which it is a sort of rival. No great amount of business was done at the house until Messrs. Wyatt and Douglas conceived the idea of making a stock opera company and giving a summer season of English opera at cheap prices. Mrs. Bettina Padelford was the prima donna and a very fair company was engaged, and the pieces were very well staged, but after losing about \$8000 in the venture the managers concluded that it was a little early yet to try a stock opera company in Los Angeles. On the first of October last the theater was leased by McLain & Lehman, both old residents here and well known in the theatrical profes-

EDUCATIONAL INSTITUTIONS.



(1) Normal School. (2) Ellis College. (3) St. Vincent's College.



A typical Southern California natural beehive.

sion. These gentlemen began without any bookings but in three months they have played a number of good attractions, and have always managed to come out ahead. Their engagements have been as follows: Herrmann, the magician; Humpty Dumpty Pantomime Company; Nellie McHenry, Barnes of New York Company, Frank Mayo, in *Daisy Crockett and Nordeck*; John Slater, Uncle Tom's Cabin Company and Georgia Minstrels.

The Pavilion, with a seating capacity of 3500, is a substantial structure, but on account of its size has only been used for large affairs, such as the May flower festival, Sam Jones, the revivalist, and the Gilmore concerts.

The Turnverein Hall, with a seating capacity of 750, and Armory Hall, which will seat 1000, are both favorite places for concerts, lectures and dramatic and social entertainments. The Illinois Association Hall, corner Sixth and Fort streets, just completed, will seat about 900 people.

Heavy Postoffice Business.

The receipts of the Los Angeles postoffice during 1889 amounted to nearly \$200,000, instead of \$20,000, as is made to appear by a typographical error on page 15. The total increase of pieces delivered was 1,138,185. These figures show a vast and significant increase over 1888.

THE FIGS OF COMMERCE.

Experiments in Culture in California—Results Thus Far.
[California Fruit-Grower.]

At Smyrna, Asia Minor, the figs grown in the interior are marketed and packed for export. In all the districts except that of Aidin the figs are excellent while fresh, but lose their flavor and become colorless when dried. The fig know in this country as Smyrna, or "figs of commerce," are cultivated and grown in the Valley of the Meander, in the district of Aidin. When fresh these figs are not palatable; but when dried nearly every person can speak of their delicious qualities, which thus far stand unrivalled by the product of any other country or any other locality, even in Asia Minor. At present there is a considerable amount of interest manifest in this State regarding fig culture. That we possess a suitable climate there can be no doubt. Our soil and water are matters for investigation. Experiments in fig growing in this State have been made, proving that the locality in which the fig is grown has much to do with the quality of fruit of the same variety. There seems to be considerable difference of opinion as to the true name or variety of a small white fig grown in the State, called by many the White Adriatic. It is a very fine, thin-skinned, sweet, delicate fig, and

when dried resemble the Smyrna or "fig of commerce" more closely than any other known variety.

A few years ago several gentlemen in connection with the Bulletin Company, imported at considerable expense fig cuttings from Smyrna, care being taken to secure, if such a thing were possible, the variety grown in the Aidin district. These cuttings were distributed and planted in various parts of the State. They show vigorous growth and have become large, strong trees, and many have fruited, but the fruit does not mature, but drops off when about the size of a walnut. Very many reasons have been given for this freak of nature. Can it not be possible that we expect too much from these trees, which are very young, having been imported during the year 1882? Would it not be well for growers who possess these trees to wait a reasonable length of time for these fig trees to mature and bear fruit? In Asia Minor the fig tree fruits when 8 years old, but does not yield any quantity of fruit before its 12th or 15th year. If this is the habit of this fig tree in Asia Minor, what may we expect from it when transplanted in California? Not better results than when in its native soil. At the age of 15 years the fig tree of Aidin yields an average of from 40 to 100 pounds of fruit. These trees live to a very old age, being in their prime at 100 years, bearing from 225 to 350 pounds of figs. It is claimed of the Aidin trees, that when planted in other localities they grow well but fruit poorly, producing figs of a very inferior quality. The trees are propagated by seeds, suckers and cuttings. The fruit varies in color from deep purple to yellow and nearly white. The trees bear two crops; one ripens in the early summer from buds of the previous year, and the other in autumn from those of the spring growth; this latter forms the chief crop. The *figus carica*, the name of the variety producing the "fig of commerce," grows to a height of 18 or 20 feet, and has broad, rough, deciduous leaves, very deeply lobed on the cultivated variety, while in the wild state showing little or no lobe.

HARVESTING THE CROP.

The figs are allowed to remain upon the trees until perfectly ripe, when they commence to wither and dry; at this point some varieties drop from the trees of their own accord, and others have to be gathered from the trees, when the north wind is blowing; then they are spread on some clean, even surface, in the sun, for several days to dry. When properly cured the figs are packed in bags and sent to Smyrna, the fig market. Here the exporters purchase their supplies, which are conveyed to the packing establishment and graded, after which the men and women packers work the figs between their thumbs and forefingers. This softens and puts the fig into shape for packing. While manipulating the figs, the packers keep their hands well wet with sea water, as it is claimed that the brine hastens the sugaring of the fruit. For the purpose of improving the flavor and keeping out the moth-miller, laurel leaves are placed between the rows or layers as the figs are being packed in the boxes.

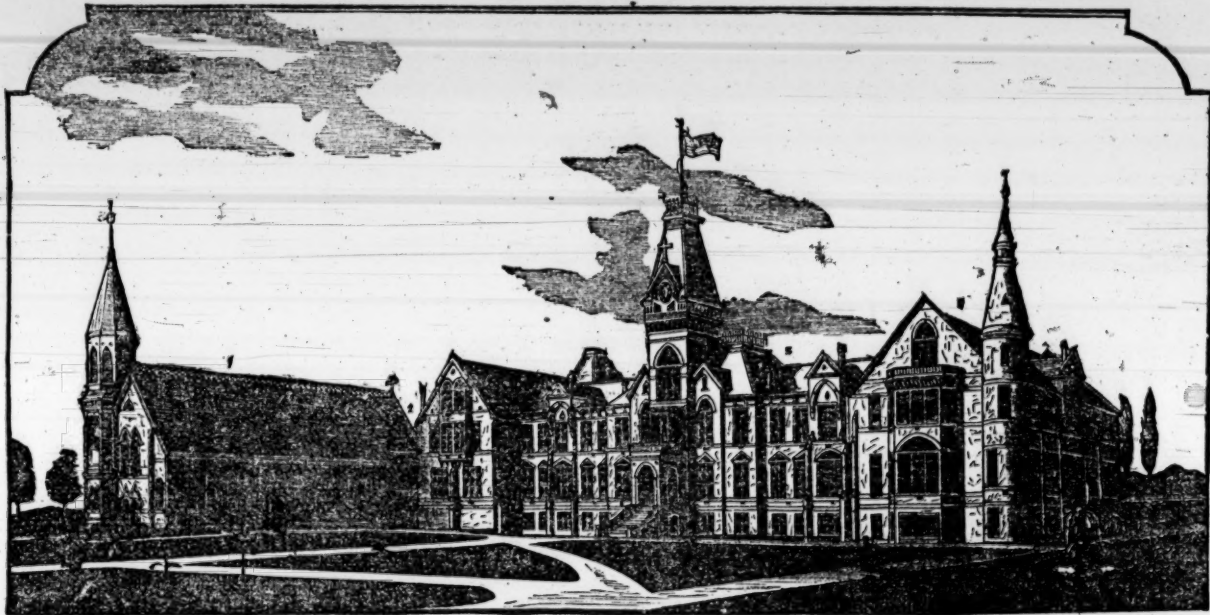
The climate in and about Aidin is very much like that of our own State. The winters are very wet, springs very early and short, summers dry, with autumn all that could be desired for the cultivation of this fruit. The hot season sets in about May 15th. From that time until the middle of September the thermometer ranges from 78° to 90° in the shade. The wind blows chiefly from one direction and for long intervals. On the sea coast the heat of summer is tempered by a sea breeze which blows very strong every afternoon.

COMPTON.

A Butter and Cheese Center—Poultry, Plenty and Homes.

Compton is a town of the sixth class, about 12 miles south of Los Angeles, surrounded by one of the most productive sections of the county. It is a country well suited to the production of grains, alfalfa, potatoes, pumpkins, and all sorts of root crops, apples, peaches, pears, walnuts and small fruits of every description. The land is well watered and much of it naturally moist so that it will grow crops without irrigation. Naturally such a country is well suited to stock of all sorts and poultry. The farmers and residents in the town are a well-to-do class.

Compton is a temperance town, the manufacture or sale of intoxicating liquors being prohibited by ordinance. There are about 20 business firms in the place and a population of 500. The principal exports are grain, hay, cabbage, wool, potatoes and fruit. Compton has made substantial steady progress during the year, and has felt as little effect from the reaction from the boom times as any place in Southern California.



St. Vincent's College and Church, Los Angeles.

CITY MONEY.

RECEIPTS AND EXPENDITURES
FOR THE YEAR.

Report of the Expert Who Has Been
Investigating the Books—The
Cash Received and Paid
Out and What For.

FOLLOWING is the City
Treasurer's summary of annual
report of all money transactions
of the city of Los Angeles from De-
cember 1, 1888, to November 30, 1889:

December 1, 1888.	
Balance on hand.....	\$ 530,838 81
November 30, 1889.	
Cash fund.....	\$ 11,564 06
Salary fund.....	207,823 46
Common school fund.....	140,140 42
Tax 1889-90 fund.....	46,492 58
Library fund.....	294 50
Street deposit fund.....	6,439 25
New water fund.....	11,474 05
Redemption fund.....	9,325 34
Sewer imp't fund.....	4,944 81
Tax 1888-89 fund.....	79 75
Westlake Park fund.....	60,443 12
School imp't fund.....	100,000 00
T and S. S. B. 1889	
fund.....	178 08
Sundry funds.....	1,953 40—1,022,068 40
Total.....	\$1,552,904 71

Cash fund.....	210,484 10
Salary fund.....	175,043 41
Fire department fund.....	74,183 44
Common school fund.....	151,328 43
New water fund.....	12,286 82
General sewer fund.....	3,584 39
Library fund.....	8,311 39
Street sprinkling fund.....	40,611 56
Irrigation system fund.....	8,325 43
City Hall fund.....	160,119 43
T and S. 1870 fund.....	4,641 00
Main sewer 1877 fund.....	1,172 50
T and T. 1877 fund.....	12,051 20
Gen. irrigation fund.....	2,715 59
Bond 1881 fund.....	4,460 00
Gen. imp. bond fund.....	14,700 00
Redemption fund.....	9,465 66
Dog fund.....	849 05
Sewer imp't fund.....	7,754 84
Street deposit fund.....	6,741 55
Tax 1887-88 fund.....	1,054 50
Gas fund.....	42,631 02
Bridge imp. fund.....	71,097 85
Salinasva n-r, imp. fund.....	2 97
Tax 188-90 fund.....	563 78
Spring-st. paving fund.....	286 85
Main-st. paving fund.....	1,236 83
Mission road fund.....	314 74
Arnold-st. fund.....	3,574 00
Westlake Park fund.....	3,244 85
Tax 1889-90 fund.....	1,520 48
Kuh-st-st imp fund.....	88 00
Park fund.....	20,571 03
Contingent fund.....	84 05
School imp. fund.....	28,080 00
Total disbursements.....	\$1,108,842 34
Bal. cash on hand Dec.	
1, 1889.....	444,062 37

CITY AUDITOR.

Following is the City Auditor's
summary of annual report of all money
transactions of the city of Los Ange-
les from December 1, 1888, to Novem-
ber 30, 1889:

City Treasurer's Debit.	
December 1, 1888.	
Outstanding warrants.....	\$ 5,098 87
Balance in bank.....	\$ 525,137 44
November 30, 1889.	
Engineer's fees and ad- vertising.....	6,894 26
Sale of property.....	961 60
Advertising and costs, delinquent taxes.....	2,107 50
Various sources, cash fund.....	1,580 70
Licenses sold.....	191,779 59
Delinquent licenses col- lected.....	2,478 75
Hay market fees.....	709 63
Fees and fees, justice courts.....	11,565 22
Fees, inspector weights and measures.....	561 20
Building permits.....	380 00
Other sources, salary fund.....	91 16
County apportionment, school money.....	43,738 25
State apportionment, school money.....	95,898 75
Other sources, school fund.....	603 42
	140,140 42

Taxes, personal prop- erty 1889-90.....	24,797 56
Taxes, 1889-90.....	410,595 00—465,492 56
D es and fines, Li- brary.....	594 50
Street deposits.....	6,439 25
Sales water and fishing permits.....	11,474 05
Redemptions.....	9,325 34
Sale sewer p po.....	4,944 81
Sewer assessments.....	79 75
Taxes 1888-89.....	60,443 12
Contributions to West- lake Park.....	400 00
Proceeds 100 school bonds.....	100,000 00
Accrued interest on bonds.....	178 08
All other sources in pre- vious funds.....	1,953 40
Total.....	\$1,547,505 84

City Treasurer's Credit.	
November 30, 1889.	
Cash fund.....	210,484 10
Salary fund.....	174,747 78
Fire Department fund.....	63,544 29
Library fund.....	8,311 39
Gas fund.....	42,611 62
Street Sprinkling fund.....	40,649 81
City Hall fund.....	164,075 63
Common School fund.....	181,872 48
Bridge improv'm't fund.....	71,111 71
Tax 1889-90 fund.....	2,503 25
New water fund.....	12,088 27
Sewer improv'm't fund.....	7,754 84
General sewer fund.....	3,588 89
Westlake Park fund.....	3,414 88
Park fund.....	20,571 03
School improv'm't fund.....	28,080 00
Street deposits returned.....	6,706 35
Certificates redeemed.....	9,714 04
Interest coupons red'm.....	39,837 20
Irrigation system fund.....	8,325 43
Sundry funds.....	7,584 20
Total credit.....	\$1,108,842 34

Balance in hands of Treasurer.....	\$437,536 49
Balance outstanding warrants and demands.....	6,525 88

Treasurer's balance, per his re-
port November 30, 1889..... \$444,062 37
Note—The above reports were
furnished
The Times by Edgar Moore, expert account-
ant, after an examination of the city's books.

REDONDO BEACH.

Important, Commercially and as a
Resort.

This new seaside resort and com-
mercial point, pushed by the capital
and enterprise of a strong company,
has made rapid strides during the past
year.

A wharf has been completed at an
expense of about \$80,000, where vessels
of the Pacific Coast and other lines, in-
cluding all the sailing craft, land regu-
larly and receive and discharge cargo.
Ship and rail are here brought directly
together, and it is a fact that freight
landed at Redondo makes very much
faster time than that brought in by
way of San Pedro.

A branch line of the Santa Fe's sys-
tem was built to Redondo during 1888,
and during the past year an independ-
ent narrow-gauge road has been built
by the Redondo Beach Company and
placed in operation. This road has
recently been granted a right of way
into the city, and will land its passen-
gers at Grand avenue and Jefferson
street, where it will connect with the
cable service of the city. The company
has also completed within the year an
elegant seaside hotel at a cost of \$120-
000, and is now erecting a brick build-
ing for a depot and general offices.
Car shops for the Redondo line will
also be established there.

The Chautauqua Association has
erected a substantial building for its
headquarters, and numerous villa res-
idences have been built by individuals.
Redondo is already a popular place
of resort, having a fine beach and
other accessories, and it promises
shortly to become a place with extensive
shipping interests.

A Sweet Lemon.

[Oroville Register.]
George B. Springer 10 days ago
picked some lemons from a tree that
he had bought and set out from a
Sicily lemon tree. These lemons were
yet green, but he buried them in a cool

place and a day or two ago took one of
them out to try it. The lemon was
coloring rapidly and the rind was quite
thin, but the juice was as sweet as
that of an orange. There are two
crops of lemons now upon the tree and
at the same time it is filled with
blossoms.

FRUHLING BROS.

Artistic Wrought Iron Works, 118 and
120 South Los Angeles Street.

This firm ranks first and foremost in their
line of business, as their work throughout
the city and surrounding country will at-
test. They have admirably succeeded, dur-
ing their business existence in Los Angeles,
by elaborate designs and excellent work-
manship, in elevating their class of work to
the standard of the arts; have become
known throughout Southern California as
the "wrought iron artists."

Messrs. Fruhling Bros. do all kinds of
plain and architectural wrought-iron work,
brass and bronze castings, ornamental
wrought-brass railings for offices, etc., and
are thoroughly equipped for the special fin-
ishes of electroplating in bronze, brass, cop-
per and nickel, in their application to the
ornamental portions of our work, which adds
greatly to its artistic value at a compara-
tively low cost. Beautiful designs to select
from and estimates cheerfully given.

LOS ANGELES' NEW BANK.

Encouraging Business Outlook.

Every week the prosperity of Los An-
geles seems more assured. Constantly-in-
creasing indications of substantial growth
appear, till even the croakers are silenced.
One of the surest evidences of commercial
growth is that new banks find abundant
support. The wonderful elasticity of Los
Angeles in recovering from the depression
following the boom is phenomenal, and she
can successfully challenge all reports to the
contrary as false. Her business stocks are
not to be excelled in size nor architectural
beauty in the East, and she has more costly
and handsome private residences than any
city of her size in the United States.

The strongest argument in favor of pros-
perity is the success of the new bank estab-
lished four months ago, and which has held
its own in a full field during dull times.

The National Bank of California is a com-
paratively new enterprise, but its place is a
prominent and secure one in commercial
circles, as the names of the gentlemen who
comprise the power behind the throne will
afford ample proof. The president, Col.
John M. C. Marble, is an able financier, well-
known in banking and railroad circles in
the East. He is a pioneer banker of Ohio.
Owen H. Churchill, the vice-president, came
here from Montana; a cool, level-headed,
conservative business man and worthy of
all confidence.

Dr. W. L. Graves is from Fresno, where
he made a brilliant record in financial cir-
cles as president of the Farmers' Bank of
that place. The Doctor's large business
experience makes him a strong factor in
the success of any enterprise in which he
may engage.

Hon. Thomas R. Bard is identified with
the growth of California. So well known
and respected is he than mention of more
than his name seems unnecessary. His
home is in Hueneme, Ventura county.
Mr. A. H. Sherman is a resident of
Phoenix, Ariz. He is vice-president of the
Valley Bank of Phoenix, part owner of
several other banks, and, in short, one of
the largest capitalists in Arizona.

Capt. George E. Lemon of Washington,
D. C., is a prominent attorney and capital-
ist of that city, identified with many large
enterprises; also a member of New York
Stock Exchange.

E. F. C. Klockke, lately from Chicago,
where he was prominent in public affairs,
Clerk of Cook county, one of the most im-
portant offices in the State.

Dan McFarland is from Ohio and is a
business genius, all his undertakings prov-
ing his ability by their success.

Mr. Fred Eaton, a native of this locality,
is the new City Engineer, the builder of
the Burdick block, in which is situated the
National Bank of California.

W. G. Hughes, the cashier, is a well-
known and highly respected business man
and an old resident.

Perry Wildman, the assistant cashier, is
from Arizona. His business career has been

a preeminently successful one. Mr. Wild-
man brings a ripe experience to his new
field, and will prove a valuable member of
the board.

Can aught but a successful career be
propheesied for a bank with so competent a
force of directors?

If strict integrity, experience, a habit of
success and abundant means for so large an
enterprise can be regarded as an earnest of
success then the new bank starts under the
most favorable auspices.

Los Angeles may well be proud that she
has been chosen as the focus of so much
financial ability, and feel her future assured
because of the confidence of experience in
her prospects.

R. J. Adcock, Attorney at Law.
Practices in all the courts of the State, and
Supreme Court. Collections made, and land
titles adjusted. Room 1, 8 1/2 North Spring st.
Jno. Mansfield,
attorney at law. Rooms 50 and 51 Temple block.

I have for sale two or three real-
estate bargains consisting of large
and desirable tracts of acre prop-
erty within the city limits of Los
Angeles. These properties have
never been subdivided, and in their
present condition afford an excel-
lent opportunity for profitable in-
vestment to any one who believes
in the future of this city. Have
also a fine lot on Saventh-street
cable line. No fancy figures asked.
I desire to sell only an undivided
interest in these properties, keep-
ing an interest myself, believing
that there is a large profit to be
realized in the future.

G. A. DOBINSON, Owner,
114 S. Fort Street, Los Angeles.

R. A. CRIPPEN & SON,

113 S. Fort St., Y.M.C.A. Building,

Offer special inducements in the

Purchase of City and Country
Property.

Some very desirable 5 and 10-acre tracts at
East Santa Monica, one of the most desirable
locations for suburban homes in all Southern
California. A large list of

Los Angeles City Property for Sale
or Exchange.

THE BEST TIME TO INVEST IS NOW.

See Our List and Prices.

J. C. BLACKINTON, F. E. PIERCE,
Graduate Ontario Vet- Graduate Chicago
erinary College, and Veterinary Col-
McPherson's School lege, Chicago, Ill.
of Veterinary Den-
tistry, Toronto, Canada.
TELEPHONE 337.



314 South Fort Street.

Fine accommodations for treating sick
animals. Specialties, Veterinary dentistry,
cattle and canine practice. Charges moderate.

Real Estate.
ANDY W. FRANCISCO,
FORMERLY OF
Cincinnati
and
Columbus O.
THOS. J. STUART
FORMERLY OF
Jeffersonville,
Indiana.

FRANCISCO & STUART,
DEALERS IN
Real Estate.
NEGOTIATORS OF LOANS AND MORTGAGES.

Have for sale some of the best property in Los Angeles. Also, fine orchards near the city and ranches throughout the county and Southern California.

OFFICE, 120 WEST FIRST ST.,
Telephone 687. Adjoining Nadeau Hotel.

D. McFarland,
DEALER IN
Real Estate.

Buys and Sells Mortgages, Bonds, Etc.

Ranches and Farming Lands a Specialty.

Room 13, No. 29 West Second Street,
LOS ANGELES, CAL.

J. C. Oliver's Real Estate Bargains
FOR SALE.

SAFE INVESTMENTS AND GOOD BARGAINS.

ONE OF THE CHEAPEST.
A beautiful 10-room, 2-story residence, between Main st. and Grand ave.; cement walks and curbing; \$4500.

COZY AND CONVENIENT.
Six large rooms and bath, lot 50x150, and small house in the rear; \$3500.

\$2800
will buy a very pretty cottage of 6 rooms, in good location.

\$3500
will buy a 2-story, 6-room house on one of the best-graded streets in the city; select neighborhood.

\$20,000
will buy an elegant mansion on a southwest corner of Washington street, and one acre of ground filled with choice fruit, shrubbery and flowers.

\$60,000
will buy a choice piece of business property on Spring st., between First and Second, consisting of a lot containing about 6000 square feet and a good 2-story brick building. It will yield 7 per cent. net on the investment.

13 PER CENT ON THE INVESTMENT.
A fine brick warehouse on Main st., 100x100; cement floor; leased for 5 years at an annual rental of \$1620 per year; \$12,500 (rent paid promptly).

THE GREAT CHINO RANCH
sugar refinery is now an assured fact. Adjoining this there is offered for sale one of the best and the cheapest ranches on the coast; 560 acres all under the plow; splendid land for sugar beets, potatoes, corn or grain of any kind. There are two good windmills and wells; 2 houses and large hay barn; 8 good mares, 1 stallion, 10 yearling colts; a full line of farming implements; 100 tons of hay, 400 sacks of barley; the whole included at \$40 per acre; one-fifth cash, balance in 1, 2, 3 and 4 years at 6 per cent; would take Los Angeles city property in part exchange.

A BARGAIN UNSURPASSED.
In the county. Forty-seven acres 4 miles from the city; beautiful foothill ranch, 15 acres in oranges 5 to 12 years old, very fine; 4 acres English walnuts 10 years old, full of fruit; 2 acres of almonds, prolific bearers; 5 acres in assorted fruits; 2 acres eucalyptus; 300,000-gallon reservoir; 6 shares of water to the acre; soil unsurpassed for fruit; one mile from the dummy station; this is one of the best ranches of the kind in the county, and offered very low; located at Glendale, which shipped over 21,000 boxes of oranges this season; offered for about one-half its value.

AN IDEAL ORANGE GROVE.
9 1/2 acres of the golden fruit in its native lair; the trees mostly of the navel variety, 8 years old, vigorous, healthy and great bearers; located in one of the few spots where the soil, moisture and climate are combined in perfection; fruit from these trees has been produced 19 inches in circumference; the location is one of the most healthful in the county; about 1 1/2 miles from the town of Azusa. \$900 per acre.

A LOVELY HOME.
5 acres near the city limits. A good house of 8 rooms, nestled amongst a wealth of rosevines, luxuriant shrubbery and fruit-laden trees. A fine orange grove, trees in their prime, 18 years old, and almost every kind of deciduous fruit that grows; apples, peaches, pears, plums, prunes, nectarines, apricots, persimmons, pomegranates, figs, walnuts, chestnuts; 80 varieties of roses. Churches, schools and good neighborhood surrounding. \$8000.

Rancho Grande Macha Bueno, 100,200 acres, 30 miles southeast of the city; 35,000 acres of arable land, the greater portion of which is not surpassed in richness and fertility, being highly adapted to the citrus and deciduous fruits of Southern California; 12,000 acres now under cultivation; about 6000 acres rough and mountainous, and containing valuable deposits of coal and gypsum; balance grazing land; abundance of water for development. \$15 per acre.

J. C. OLIVER,
No. 55, Fort St.
BEFORE YOU COME WRITE TO
Information Bureau,
E. NITTINGER, Manager,
LOS ANGELES, CAL.

Real Estate.
MILLER & HERRIOTT,
34 North Spring Street
DEALERS IN
Real Estate.
WE ACT AS AGENT FOR CAPITALISTS.
MAKE LOANS, PAY TAXES, COLLECT RENTS AND INTEREST.

Buy and Sell Real Estate.

WE ARE THE OWNERS OF

The Beautiful Harper Tract,

Which is located on West Adams street, and near the St. James Park, and in the neighborhood of all those fine places on Adams street.

The Streets in the Harper Tract

ARE NICELY

Graded and Graveled.

Cement Walks are Laid in Front of Each Lot.

THE STREETS ARE LINED WITH THE GRACEFUL PEPPER TREES.

Water piped on all the streets. Most all the buildings in this tract are two-story, modern built. So if you want a home in a choice neighborhood go to the

HARPER TRACT,

where you can get as large a lot as you want

From \$15 Per Front Foot Up,

or if you want a home built we will superintend it for you.

If you pick out a lot on the Harper Tract part of this tract is covered with 10-year-old orange trees now full of oranges.

We have been in the real estate business before the boom, and in the boom and since the boom; so we consider ourselves well posted as to values of real estate in Southern California.

We have applicants for money at 8 and 10 per cent. net to lender, with good real estate security.

CORRESPONDENCE SOLICITED.

Miller & Herriott,

34 N. Spring Street,
LOS ANGELES, CALIFORNIA.

LOS ANGELES DETECTIVE
Bureau will furnish reliable and expert detectives to private persons on short notice; we investigate all classes of crime; locate missing parties; obtain evidence in civil and criminal actions; and all other legitimate business attended to with dispatch. All transactions strictly confidential; best of references given when required; terms reasonable. Address all communications to THOMAS MCCARTHY, Superintendent, Room 38, Wilson block.

LOS ANGELES, California.

THE NEW
HOTEL WESTMINSTER.

Opened March 1st, '88. Capacity, 400 guests. Luxuriously furnished and most delightfully located. Rooms single and en suite. Rates graded from \$2.50 to \$5.00 per day, according to location.

O. T. JOHNSON, Prop.
M. M. POTTER, Manager.

HENRY BOHRMANN,
414 S. Spring St., Los Angeles, Cal.

Manufacturer, Wholesale and Retail Dealer in

Wood, Iron and Slate Mantels,

Bank, Office and Store Fixtures,

Fine Cabinet Ware Made to Order.

Art Tiles for mantel decorations, Grates, Brass Goods, Gas Lamps and all kinds of Open Fire Places kept in stock and made to order. Floor, hall and vestibule Tiles at eastern prices. TELEPHONE 788.

T E A S
WHOLESALE

G. T. HANLY & CO.,

318 Upper Main st.

BANKS.
REPORT OF THE CONDITION
OF THE
FIRST NATIONAL BANK
LOS ANGELES,
At the Close of Business, Dec. 11, 1889:

ASSETS:
Loans and discounts..... \$1,462,033 02
United States bonds, 4s..... 150,000 00
Premiums paid..... 24,142 63
Other Stocks, Bonds and Warrants 244,262 08
Cash on hand and in banks..... 672,537 69
Real Estate including bank premises, furniture and fixtures..... 91,031 64
Total..... \$2,314,629 00

LIABILITIES:
Capital stock paid in..... \$300,000 00
Surplus and undivided profits..... 233,736 33
Deposits by banks..... 67,200 87
Deposits by individuals..... 1,639,893 80
Deposits by Government..... 110,000 00
National bank notes outstanding..... 41,750 00
Total..... \$2,314,629 00

J. M. ELLIOTT, E. F. SPENCE,
Cashier. President.

E. F. SPENCE, President
JOHN BRYSON, SR., Vice-President
JOHN N. HUNT, Secretary and Treasurer

Savings Bank
—OF—
Southern California,

SOUTHEAST CORNER SPRING AND COURT

STREETS, LOS ANGELES.

CAPITAL - - - \$100,000.

DIRECTORS:

George H. Bonebrake, F. C. Howe,
John Bryson, Sr., John B. Hunt,
H. L. Brew, Hiram Mabury,
J. M. Elliott, E. F. Spence,
C. N. Hason, Samuel B. Hunt.

Insurance.

WM. J. BRODRICK,

FIRE, MARINE, LIFE AND ACCIDENT

INSURANCE AGENT,

NO. 10 COMMERCIAL STREET,

Telephone 31. Los Angeles, Cal.

Thames and Mersey Ins. Co. (limited), Etna Ins. Co. of Hartford, State Investment Ins. Co. of San Francisco, German-American Ins. Co. of New York, Travelers Ins. Co. of Hartford, Liverpool and London and Globe Ins. Co., North British and Mercantile Ins. Co., London and Lancashire Ins. Co., Manchester Ins. Co. of Manchester.

Under Los Angeles National Bank.

Telephone No. 832. LOS ANGELES, CAL.

Agent for Phoenix Insurance Company of Brooklyn N. Y.; gross assets, \$1,062,727; losses paid, \$3,355,536.92. American Fire Insurance Company of Philadelphia; gross assets, \$2,401,933; losses paid, \$1,112,743.55. The Liberty Insurance Company of New York city; cash capital, \$1,000,000.

Unclassified.

MEXICAN TONIC.

The Dyspeptic, the Debilitated and those Suffering from Constipation will on trial find that the

Mexican Tonic Is a Specific.

We have numerous testimonials from people who have been cured.

Correspondence Solicited.

Mexican Tonic Co.,

127 New High St., Los Angeles, Cal.

T. C. NARAMORE'S OFFICE,

Manager and joint owner of new Wilson block, corner of First and Spring sts., Los Angeles, Cal.

MONEY TO LOAN. OFFICES TO RENT.

Real estate broker and general financial agent.

Life Insurance.
THE BEST COMPANY.
—THE—
MUTUAL LIFE
INSURANCE COMPANY
—OF—
NEW YORK.

RICHARD A. McCURDY, President.

The vast beneficence of the work of this great company goes on so quietly and smoothly that it is not always known or understood by the general public. The following statement of payments made by the MUTUAL LIFE INSURANCE COMPANY to the holders of its policies or to their beneficiaries from organization to October 31, 1889, shows the GRAND TOTAL (embracing every form of claim) to be \$285,417,206.23.

NEARLY THREE HUNDRED MILLIONS OF DOLLARS IN THE COMPARATIVELY SHORT SPACE OF 46 YEARS.

Here are the items:

Paid for Death Claims, \$100,118,209 35

Paid for Matured Endowments..... 25,933,543 10

Paid for Annuities... 844,985 22

Paid for Surrenders... 77,407,493 20

Paid for Dividends... 81,062,975 36

Total..... \$285,417,206 23

While over \$126,000,000 were paid for Death Claims and Endowments, over \$81,000,000 were paid the policyholders in dividends to reduce the cost of yearly premiums. The natural question following a perusal of the above figures will be, "What did the company receive from its policy-holder?"

For purposes of exact comparison we cannot calculate beyond December 31, 1888, but up to the beginning of the present year the stewardship of THE MUTUAL LIFE can be accurately gauged. From its organization until December 31, 1888, it received from policyholders in premiums \$337,951,415 88; it paid to policyholders during same period, \$272,431,338 74; and should have on hand, \$65,470,077 14. Instead of which THE MUTUAL LIFE has accumulated the vast fund of \$126,082,153 56, or SIXTY MILLIONS SIX HUNDRED AND TWELVE THOUSAND SEVENTY-SIX DOLLARS, made for its policyholders by judicious investment to December 31, 1888.

EVERY DOLLAR OF THIS \$126,082,153 56 is now held securely invested for the benefit of its policyholders to meet promptly the payment of all just claims.

CAN ANY OTHER INSTITUTION IN THE WORLD SHOW A STEWARDSHIP LIKE THIS?

THE MUTUAL LIFE INSURANCE COMPANY OF NEW YORK
Is truly THE BEST COMPANY FOR POLICY-HOLDERS.

All persons who desire to have safe LIFE INSURANCE in this WONDERFUL COMPANY are requested to apply to

A. B. FORBES,
General Agent,
401 California Street,
San Francisco, Cal.,

Or to any of the authorized agencies of the Company, established in all the principal cities and towns of this Pacific Coast.

G. A. DOBINSON,
Resident Agent,
114 South Fort Street,
Los Angeles, Cal.

BANKS.

FARMERS' AND MERCHANTS' BANK

Of Los Angeles, Cal.

THOMAS W. HELLMAN.....President
 F. C. GOODWIN.....Vice-president
 Capital.....\$500,000
 Surplus.....\$0,000
 Total.....\$1,500,000

STOCKHOLDERS:
 D. W. Childs, Andrew Glassell,
 L. L. Bradley, Cameron K. Thom,
 Philip E. Garner, Domingo Amestoy,
 James B. Lankershim, Louis Polaski,
 F. L. Duque, Presley C. Baker,
 Jose Mascares, Oliver H. Bliss,
 Chas. Ducommun, Estate D. Solomon,
 Frank Lecourtneur, Jacob Kuhnle,
 Sarah J. Lee, Ismael W. Hellman,
 Chris Heune.

SOUTHERN CALIFORNIA NATIONAL BANK

NABEAU BLOCK,
 Cor. First and Spring sts., Los Angeles, Cal.

L. N. BAKER, President.
 W. F. BOZARSKILL, Vice-President.
 C. N. FLINT, Cashier.

Paid-in Capital.....\$500,000
 Surplus and Undivided Profits.....\$0,000

DIRECTORS:
 D. Remick, Thos. Goss, L. Gottschall,
 L. N. Baker, H. T. Newell, H. A. Barclay,
 Charles E. Day, M. Hagen, Frank Rader,
 E. C. Boobyshell, W. F. Boobyshell.

THE UNIVERSITY BANK

OF LOS ANGELES,
 No. 129 New High Street.

Capital Stock, paid up.....\$100,000
 Surplus.....\$0,000

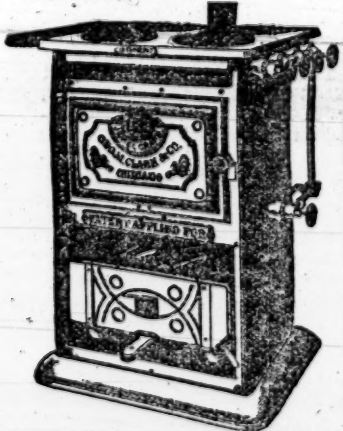
R. M. WIDNEY.....President
 GEORGE L. ARNOLD.....Cashier.
 Eight per cent. bonds, secured by first mortgage on real estate, with interest payable semi-annually, are offered to investors of \$250 and upward.

DIRECTORS:
 R. M. Widney, S. W. Little, C. A. Warner,
 D. O. Miltimore, C. M. Wells, L. J. P. Morrill,
 L. H. Titus.

Unclassified.

Buy your Hardware, Tinware, Cook, Oil, Gas and Gasoline Stoves, and get your Plumbing and Gasfitting done by

CHAPMAN & PAUL,
 Nos. 12 and 14 Commercial Street and
 314 South Spring Street.
 Telephone No. 42. Branch 418.



EMPIRE

Livery and Boarding Stables

HAVE REMOVED TO

NO. 220 S. MAIN ST.

Panorama Building.

Hallet & Hidden, Proprietors.

K. COHN & CO.,

DEALERS IN

HIDES AND WOOL

295 North Main Street,

LOS ANGELES.

GURNEY CAB SERVICE.

A CAB, SIR?

TO ANY PART OF THE CITY WITHIN
 THE MILE CIRCLE.

—25 CENTS.—

Medical.

DISEASES OF THE

Head, Throat, Lungs,

Successfully treated by

M. HILTON WILLIAMS,

M. D., M. C. P. S. O.,

By his Hot Air Medicated Inhalations and his
 COMPOUND OXYGEN TREATMENT.

CATARRH and CONSUMPTION, etc., are now conceded by all scientific investigators to originate from a living germ or parasite so small as to be invisible, except when placed under a powerful microscope.

Our hot air medicated inhalations absolutely kill and destroy every living germ, millions of which are found floating in the expectoration, or after the death of the patient, found imbedded in the mucous surface lining the air passages, while our compound oxygen antagonizes and thoroughly removes every poison of the system from the blood, no matter from what cause it exists or how long it has continued, and is efficacious in the cure of Catarrh, Throat Diseases, Asthma, Bronchitis, Consumption, Nervous Prostration, Insomnia and Dyspepsia, etc., together with any poisoned condition of the blood.

In all cases of catarrh and other diseases of the Respiratory Organs, where the system suffers from the deleterious effects of scrofula or other vitiated condition of the blood, local treatment is invariably conjoined with constitutional remedies.

Persons desiring treatment by this system of practice can use the remedies at home as well as at our office, and which will cause no inconvenience or hindrance to business whatever.

Those who desire to consult with me in regard to their cases had better call at the office for an examination, but if impossible to visit the office personally, can write for list of questions and circular, both of which will be sent free of charge. Address

M. HILTON WILLIAMS, M. D.,
 37 S. Fort St., Los Angeles, Cal.

OFFICE HOURS—From 9 a.m. to 4 p.m.
 Sundays—From 2 to 2:30 p.m.
 Residence, 15 South Grand ave.

Laundries.

Troy Laundry Co.

MAIN OFFICE,

CORNER SPRING AND FIRST STS.,

Under L. A. National Bank.

Works, 571 to 575 N. Main St.
 Telephone 46 or 1081.

TROY SYSTEM.

Largest and Best Equipped Laundry
 IN THE CITY.

All of our machinery is of the best and
 latest improved make.

We Do a General Laundering
 Business.

Our Collar, Cuff and Shirt Work
 Can't be Equalled.

FLANNELS ARE HAND-WASHED.

HOTEL, RESTAURANT

And Lodging-house Work

Done on very short notice and washed with
 pure borax soap. Perfectly odorless. POSI-
 TIVELY NO ACIDS AND LIME USED IN
 WASHING.

GENTS' LAUNDRY

A SPECIALTY.

WAGONS WILL CALL ANY PART OF CITY.
 Strangers while in the city would do well to
 call and examine our work before going else-
 where.

IN ORDER TO GIVE OUR PATRONS AN
 OPPORTUNITY TO SEE HOW WE
 DO OUR WORK.

And that we use no chemicals in process of
 washing, we will hereafter open the laundry to
 visitors every Wednesday afternoon. We ex-
 tend a special invitation to visit the laundry.

Excelsior Steam Laundry,

Main Office, 15 West Second St.

TELEPHONE 307.

Our work is the best in the State.

We employ none but experienced help.

Give us a trial and compare our work with
 that of others. All mending on gents' cloth-
 ing done without extra charge.

Branch offices in all parts of the city. Our
 wagons call for and deliver work free.

\$1,500,000

TO LOAN AT R. G. LUNT'S
 LOAN AND INSURANCE AGENCY,
 Redick block, corner of First and Fort streets.
 Loans made on improved city property, country
 farms, dwellings.
 Building loans made. Lowest rates.
 AGENT FOR THE
 GERMAN SAVINGS AND LOAN SOCIETY
 Of San Francisco, Cal.

Unclassified.

ORANGE LAND

AT REDLANDS.

At \$250 Per Acre on 10 Years' Time.

W. P. MCINTOSH, President and General Agent of the Barton Land and Water Com-
 pany, is now selling the best ORANGE LAND in the city of Redlands for \$250 an acre, 10
 per cent. cash, with no other payment for ten years, except 6 1/2 per cent. interest per annum,
 with one (1) inch of water (runners' measurement), to every seven acres, in pipes to every ten-
 acre tract. San Bernardino Valley Branch Railroad and Motor Line through the center of
 ranch. Canning establishment and packing-house also on the land no fruit pests of any
 kind and not enough frost to injure the oranges. This is a good opening for the capitalist
 and business man, as well as the poor man. The fruits produced will certainly meet the
 payments. For maps and particulars apply to.

W. P. MCINTOSH,

Rooms 7 and 8, No. 42 South Main Street, Los Angeles, California.

SAN FRANCISCO. LOS ANGELES. NEW YORK.

W. W. MONTAGUE & CO.,

—IMPORTERS AND JOBBERS OF—

Stoves, Ranges, Sheet Iron, Tin Plate,

GAS AND WATER PIPE.

Plumbers' Supplies and House Furnishing Goods.

NOS. 22 AND 24 NORTH LOS ANGELES STREET, LOS ANGELES, CAL.

F. W. BRAUN & CO.,

Importers and Wholesale Druggists,

LOS ANGELES, CAL.

OUTFITTING A SPECIALTY.

TELEPHONE 934.

P. O. LOCK BOX 1112.



W. S. ALLEN,

FURNITURE

—AND—

CARPET STORE

240 AND 242 S. SPRING ST.

NEW STORE! NEW GOODS! NEW PRICES!

We extend an invitation to all to examine
 goods and get prices.

Remember the new location.

REDUCED FROM \$7 TO \$5.50.

CRANDALL STOVE & M'FG CO.,

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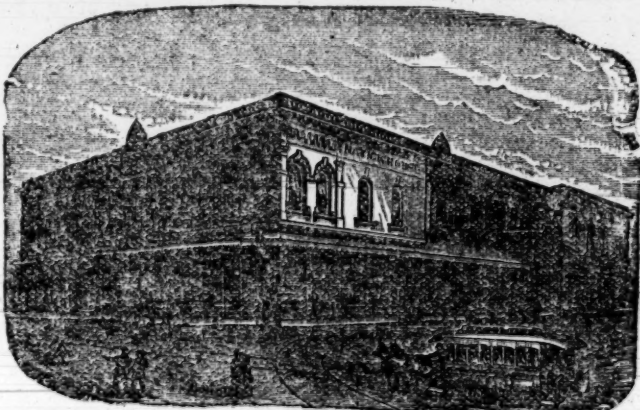
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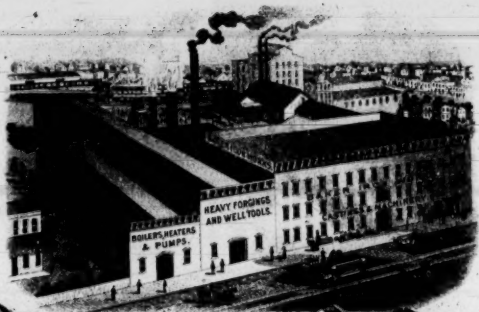
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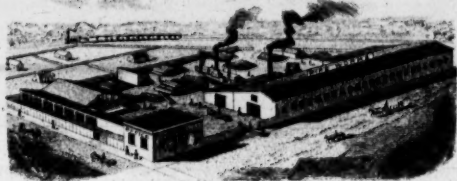
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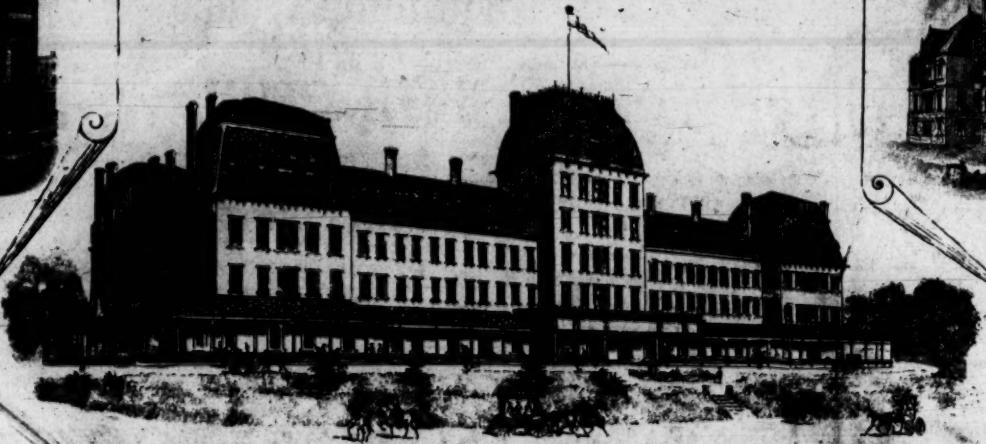
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